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ALEXANDER ANDRASON, BIBLICAL HEBREW *WAYYIQTOL*: A DYNAMIC DEFINITION

BIBLICAL HEBREW *WAYYIQTOL*: A DYNAMIC DEFINITION[1]

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1. INTRODUCTION

The goal of this paper is to provide a new definition of a Biblical Hebrew (BH) verbal construction, usually referred to as *wayyiqtol* (1).

(1) וַיַּעַשׂ אֱלֹהִים אֶת־הָרָקִיעַ וַיַּבְדֵּל בֵּין הַמַּיִם אֲשֶׁר מִתַּחַת לָרָקִיעַ וּבֵין
הַמַּיִם אֲשֶׁר מֵעַל לָרָקִיעַ וַיְהִי־כֵן

So God **made** the vault and **separated** the water under the vault from the water above it. And it **was** so. (Gen 1.7)[2]

There are two types of commonly employed functional and semantic definitions of the formation. First, when referring to taxis[3]-aspect-tense-mood (TATM) properties, the gram has most frequently been equaled with a past (definite past or preterite) or perfective past (other proposals, on the contrary, identify the gram with a present tense and imperfective aspect; for a general review of descriptions posited by temporal, aspectual, historical-comparative and psychological schools, as well as those offered by the first generation of grammaticalization framework, consult footnote 4 below). Other theories (especially, those developed by the syntactical approach) have adjoined a value of sequentiality to the TATM load of the construction. Second, when emphasizing its discourse pragmatic characteristics—and disregarding TATM values—the expression has been classified as a principal form (foreground) of the narrative backbone. However, the two descriptions are reductionist and greatly simplify the nature and substance of the *wayyiqtol*.

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[1] Certain portions of this paper have been based on my Ph.D. dissertation "*Qatal, yiqtol, weqatal y wayyiqtol. Modelo pancrónico del sistema verbal de la lengua hebrea bíblica con el análisis adicional de los sistemas verbales de las lenguas acadia y árabe*" (Andrason 2011c).

[2] All verbs that appear in the *wayyiqtol* construction (as well as their English translations) will be given in bold type. The Hebrew quotations reflect the text of the *Biblia Hebraica Stuttgartensia: With Westminster Hebrew Morphology* (1996).

[3] The phenomenon of taxis makes reference to the concepts of anteriority, simultaneity and prospectivity (Maslov 1988:64).

The former ignores or minimizes the fact that (as will be indicated in section 2) the formation provides not one but a broad range of uses and hence cannot be reduced to a single value such as past or perfective past. Nor is it appropriate to understand such frequently proposed labels (i.e. past or perfective past) as *über*-functions from which other meanings are derivable, i.e. hardly can the use of the formation with a future or stative present force be explained as a realization of its past or past perfective value (cf. section on 3.1 and the discussion on a dynamic vision of synchronic grammatical phenomena). As for the discourse-pragmatic classification (principal narrative construction), it is reductionistic in the sense that it ignores the evident semantic content of the gram as well as the fact that the formation expresses determined temporal and aspectual meanings, entailing a failure to denote others. This means that to account for the entire nature and behavior of the *wayyiqtol* is neither easy nor straightforward and that, in particular, it cannot be swept under simplifying reductionistic definitions, such as a past, a perfective past or a narrative form. There furthermore exists a third group of descriptions which, although highly valuable, are limited to a mere taxonomy (cf. e.g., Waltke & O'Connor 1990 in footnote 3). They introduce a detailed—not reductionistic—account of the semantic content of the construction without, however, providing an explanation for it: they fail to account for the relation between uses of the gram and its internal consistency.[4]

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[4] Models proposed by temporal, aspectual, historical-comparative, psychological and syntactical schools belong to the first type of descriptions. According to the aspectual view, represented, for instance, by Driver (1881), the *wayyiqtol*—as the *yiqtol*—indicates nascent or incipient actions. Moreover, in the same manner as the *weqatal*, it is a relative form, subordinate to and depending on the preceding verb. Hence, the exact moment of the ingression of the action is determined by the particle waw which positions the event conveyed by the *wayyiqtol* in relation to the previously introduced activities. As a result, the 'waw prefixed *yiqtol*' does not stand by itself but equals "the development, the continuation of the past which came before" (1881:85). Similarly, Watts (1951) argued the *wayyiqtol*—corresponding to the progressive imperfect—should be rendered by means of the verb 'begin' in past, present or future (i.e. as 'and he began', 'and he begins', 'and he will [begin to] do' (1951:39-42). Joüon, who combined the aspectual school with certain temporal ideas, argued that the *wayyiqtol* (one of the two formes invertis, Joüon 1923:319) is entirely independent from its simple morphological counterpart *yiqtol* (cf. Driver and Watts above). It rather approximates the morphologically opposite construction *qatal* (Jouon 1923:326). In his opinion, the *wayyiqtol*—as the *qatal*—principally expresses the past and aspectually punctual and unique events (unique et instantanée (Joüon 1923:320). The two constructions are distinguished by the fact that the former may provide meaning of logical or temporal succession and consequence. However, "[l]'emploi si fréquent de *wayyiqtol* dans la narration a amené un usage […] abusif de cette forme […]. On la trouve là où il n'y a aucune idée de suc-

cession" (Joüon 1923:324). In more recent times, a model built on the parameters of tense, taxis and mood has been proposed by Joosten (1992 and 2002). In Joosten's view, the *wayyiqtol* is understood as a preterite (1992:14) given that it is almost entirely limited to the expression of past events. As for the aspect, the formation itself does not have any inherent aspectual substance, but depending on context, may express both perfective and imperfective situations (Joosten 2002:68-69).

The proximity between the *wayyiqtol* and the *qatal* was also noted by defenders of the historical-comparative school. According to Brockelmann ([1908–1913] 1966), the waw prefixed tenses function as the antitheses of the simple formations: the *weqatal* equals an imperfect or a modal category while the *wayyiqtol* matches a historical past (1912:114; an analogous view may be found in Bergsträsser 1924 and 1983:55). In a similar vein, Cohen (1924:286) classified the *wayyiqtol* and the *qatal* as a perfective aspect (accompli) denominating it "l'imparfait au role de parfait".

Different aspectual models have been proposed by Rundgren and Johnson. According to Rundgren (1961), the BH verbal system was sensitive for aspectual (cursive and constative) and temporal parameters (past and non-past). The grammarian defined the *wayyiqtol* as a neutral non-aspectual past form in the unmarked fientive section of the verbal system (1961:109-101). Johnson (1979), following the distinction established by Rundgren and in accordance with the old aspectual views, claims that simple and waw extended forms do not differ as far as their semantic potential is concerned. He understands the *wayyiqtol* and the *yiqtol* as expressions of the cursive aspect. The two formations supposedly offer the same range of values (in particular, present-future and modal) derivable from their shared aspectual load.

Another member of the historical-comparative school, Jerzy Kuryłowicz, based his theory on the concept of taxis: the inherent values of the *qatal* and the *yiqtol* are anteriority and simultaneity, and their primary functions, the perfect or the past and the non-past respectively (Kuryłowicz 1972:82-83). This minimal binary system was extended in Hebrew by two consecutive formations, the *wayyiqtol* and the *weqatal*. Although the former derives from the Proto-Semitic *yaqtul and corresponds to the Akkadian iprus, it approximates the *yiqtol* expressing the simultaneity in the three temporal spheres.

Diethelm Michel (1960) rejected aspectual, as well as historical-comparative explanations. As for the *wayyiqtol*, he claimed that there was no difference in meaning between the simple and waw prefixed forms. Thus, he understands the simple conjugation as well as its waw prefixed variant as realizations of a form that has the same semantic value. The *wayyiqtol*—in the same manner as the *yiqtol*—expresses semantic dependency without any precise temporal demarcation (Michel 1960:41). This depending (substantive) nature of the formations causes that the *yiqtol* pictures events as resulting from the quality of the acting subject, while the *wayyiqtol* surfaces as an idea of consequence (Michel 1960:110 and 127).

According to the syntactic school, the principal characteristic of the *wayyiqtol* is its sequential value. For instance, Silverman (1973:168) claims that the *qatal* and the *wayyiqtol* equal a past. The distinction between the two forms is sequential: the *wayyiqtol* corresponds to a consecutive past (it

follows a *qatal*). Buth (1992) builds his model on concepts of thematic continuity and discontinuity. In his view, the four central formations (*qatal*, *weqatal*, *yiqtol* and *wayyiqtol*) are distinguishable by the parameters of (dis-)continuity and (in)definiteness. Both the [x] *qatal* and the *wayyiqtol* are said to be definite (in aspectual and temporal terms this notion equals the perfective and past). However, while the former marks the discontinuity the latter conveys a thematic continuity (Buth 1992:103-104). A similar— though more complex—solution has been proposed by Peter Gentry (1998). BH verbal forms offer a main contrast between assertive modal constructions and projective modal categories, the two groups being sensitive for two parameters: aspect (perfective vs. imperfective) and sequentiality (sequential vs. non-sequential). In the assertive set—which includes formations traditionally understood as indicative—the [x] *qatal* is defined as a non-sequential perfective and the *wayyiqtol* as it sequential counterpart (Gentry 1998:21, 30-31). Hatav (1997) defines the *wayyiqtol* differentiating it from the *weqatal* and the *yiqtol*. She postulates that the *wayyiqtol* and the *weqatal* are marked for the sequentiality—the difference between them consists in the fact that only the latter additionally conveys modal nuances. The contrast between the *wayyiqtol* and the *qatal* is more complex: the former is classified as a sequential form (non-modal, non-perfect and non-progressive), while the latter matches a perfect category (being furthermore negatively defined as non-sequential, non-modal and non-progressive). According to Goldfajn (1998), the *wayyiqtol* is a sequential form distinguished from the other sequential construction *weqatal* by a temporal parameter: the former equals a sequential past (predominantly narrative) and the latter a sequential future (usually discursive). Applying some insights from the syntactical models as well as principles of the aspectual view, Van der Merwe, Naudé & Kroeze (2000) argue that the *wayyiqtol* aspectually corresponds to the *qatal* defined as an expression of complete and completed events (most frequently surfacing as a past tense). However, although the *wayyiqtol* "bears reference to the same temporal spheres and aspects as a perfect form [*qatal*,] it is also characterized by 'progression'" (Van der Merwe, Naudé & Kroeze 2000:165). It can moreover control the flow of the narration (Van der Merwe, Naudé & Kroeze 2000:167).

Waltke & O'Connor (1990)—combining aspectual, diachronic and syntactic insights—argue that the core of the BH verbal system is constituted by a binary opposition between the *qatal* (perfective) and the *yiqtol* (non-perfective). The *wayyiqtol* corresponds to the *qatal* being an expression of perfective aspect (Waltke & O'Connor 1990:554). However, appearing after different verbal forms, it acquires a distinct force. First, following a *qatal*, the construction denotes perfective actions or perfect states in the three time frames. Second, when it follows a past *yiqtol*, it indicates (con)sequent or explanatory situations in the past equaling a definite perfective, a past (Waltke & O'Connor 1990:558). Third, after a present or a future *yiqtol*, it introduces perfective events and perfect states in the non-past time frame imposed by the preceding *yiqtol* (Waltke & O'Connor 1990:559). And four, after a habitual *yiqtol*, the *wayyiqtol* has the gnomic value (ibid.).

The discourse approach—contrary to all of the previously presented models—studies the function of BH verbal formations in relation to the

This article aims at providing a concise (i.e., scientifically manageable and to an extent formalized), non-reductionist and non-

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text transferring the analysis from words (morphology), clauses and sentences (syntax) onto larger units such as sequences of sentences or paragraphs (discourse). According to this school, since the "language is language only in context" (Longacre1983:xv), the meaning of verbal forms is available only on high levels of the linguistic analysis (such as paragraph or discourse). Conversely, all work on lower levels lacks in perspective and is inadequate (Longacre 1976:2). Schneider (1982) classifies the BH constructions into two groups: those which appear in the speech (discourse proper) and those which occur in the narration. In his opinion, the *wayyiqtol* is a foreground narrative form while the x *qatal* and x *yiqtol* are background narrative constructions, the former of the backward perspective and the latter of the forward perfective. Similarly in Talstra's view (1978:170), the *wayyiqtol* is a primary narrative form distinguished from the *qatal* which is defined as a secondary narrative and discursive form. Longacre (1992:178), employing a highly complex model of tiers (e.g. primary/story line, secondary line/background, setting, irrealis, cohesion, etc.) for each type of text, defines the *wayyiqtol* as a narrative foregrounding form advancing the mainline of the story or in other words, the backbone of the narration.

In recent times and in reaction to the discourse approach, grammaticalization and path theory based models have been proposed. Nevertheless, although employing evolutionary principles, the resulting descriptions strongly approximate traditional temporal, aspectual and modal theories. Andersen (2000) defines the *wayyiqtol* as a product of the resultative path: it derives from the Proto-Semitic *yaqtul, in his view, a perfective past (2000:17). Cook (2002), employing the framework of universal evolutionary paths, reaches a conclusion that Biblical Hebrew is an aspect prominent language with the core contrast between the perfective *qatal* and the imperfective *yiqtol*. Using evolutionary terminology, he affirms that the *qatal* and the *wayyiqtol* are products of the resultative path, i.e. a development during which resultative expressions develop into perfect (in his terminology an aspect), perfective aspect and finally into a past tense. In Biblical Hebrew, the *wayyiqtol* (historically older formations) has reached the past tense stage; its uses as a perfect—both present and past—and as a perfective are contextually conditioned (Cook 2002:253-254). The difference between the *qatal* and *wayyiqtol* stems from a distinct grammatical age of the two constructions. They follow the same path but since they had been coined at different historical periods their grammatical and functional advance is distinct: the older *wayyiqtol* is more advanced (i.e. it functions as a past—the last stage on the path) while the younger *qatal* is less developed (i.e. it functions as a perfective—penultimate stage on the trajectory). On major discrepancies between Cook's model and the author's—as well as on the differences in defying the *wayyiqtol*—see section 5.2 at the end of the paper.

It should be noted that this review of the grammatical tradition in analyzing the *wayyiqtol* and the BH verbal system is not intended to be exhaustive (for a more detailed presentation see McFall (1982), Waldman (1989), Waltke & O'Connor (1990:458–478) Endo (1996:1–26) and Cook (2002:79–162).

taxonomist definition of the *wayyiqtol*. We will define the formation in a holistic unifying manner, accounting simultaneously for all its values—as distinct and superficially incongruent as they appear—recorded in the biblical material. During our analysis, every portion of the semantic potential of the *wayyiqtol* will be treated with an equal importance; conversely, no meaning will be ignored or marginalized. Under the new view, each value will be consistent with the remaining ones. As a result, exceptional uses will cease being irregular and aberrant.[5]

Consequently, it will be demonstrated that the *wayyiqtol* may be grasped in its integrity. It can be viewed as a consistent and typologically rational phenomenon if one comprehends it as a developing prototypical resultative formation. This means that synchronically attested characteristics of the expression will be analyzed as reflecting stages of its grammatical evolution: each value matches a given phase in the functional-semantic and structural development. In other words, the diachronic approach will constitute the basis of an explanation for forms that are all traditionally understood as contemporaneous. To this combination of diachronic and synchronic levels we will refer to as 'panchrony' (see section, 3.2 below; for a detailed description of the panchronic methodology, its history and relation to the dynamization of typology, see Andrason 2010a, 2011b and 2012a).

In particular, we will employ universal diachronic clines, as posited by path and grammaticalization theories, in order to study and explain the synchronically recorded data. This is possible due to the fact that grams develop according to several strictly determined rules codified in functional and grammaticalization paths. They acquire new values that correspond to subsequent stages on a given trajectory. As a result, meanings that are synchronically provided by a gram *must* reflect successive stages of its own diachronic movement. Put differently, a grammatical formation at a given moment of its evolution is a synchronic manifestation of a diachronic progression. This progression is, in turn, required to be consistent with one of the predetermined universal paths.

In order to present a comprehensive analysis of the *wayyiqtol*, providing furthermore an explanation for it, our research will be organized in the following manner. In the following section of the article (section 2) we will provide a detailed introduction to two theories which codify the evolution of verbal categories, i.e. the path and grammaticalization models. Next, in section 3, the methodology of a synchronic description of verbal grams—based on the evolutionary framework—will be introduced. Subsequently (section 4), employing the previously explained technique of lan-

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[5] As will be explained below, exceptional uses and meanings correspond to biological atavisms, contemporarily inadequate relicts of older evolutionary stages.

guage description, the BH *wayyiqtol* will be studied. Finally, major results will be summarized and a new definition of the gram presented (section 5).

2.   THEORETICAL BACKGROUND—EVOLUTIONARY UNIVERSALS

Empirical studies demonstrate that grammatical entities evolve following certain universal rules codified in a set of unidirectional developmental scenarios, labeled, 'paths' (Heine & Kuteva 2007:57–116 and Croft 2003:251–255). In general terms, the grammatical growth may be understood as a gradual and ordered incorporation of new values and formal characteristics. To provide exact and specific representations of paths—which deterministically regulate the development of grammatical constructions of a typologically similar type—constitutes the main subject of grammaticalization and path theories (Bybee, Perkins & Pagliuca 1994:9–26, Dahl 2000:8–15, Hopper & Traugott 2003:1–3, 6–7 and Heine & Kuteva 2007:32–33 and 35–37).

2.1.   GRAMMATICALIZATION THEORY

In accordance with a traditional definition, grammaticalization theory codifies a universal process during which a linguistic unit, in an ordered unidirectional mode, acquires or expands (cf. grammaticalization proper), and loses (cf. de-grammaticalization) the degree of its grammatical force. It consists of two major and correlated phenomena: morphologization and generalization.

As for the former, it is widely accepted that linguistic entities begin their grammatical life as periphrases built on independent words employed in a specific context. At this moment, they belong to the syntactic level of the tongue. Some such lexical analytic expressions are gradually grammaticalized, and at the apogee of their development, they become pure grammatical depending morphemes. This signifies that syntactical segments develop into synthetic morphology, first agglutinative and next fusional. Subsequently, a construction undergoes further modifications which, jointly, trigger its material and physical deterioration. Finally, the formation is either lost or recycled for new grammatical purposes (Hopper & Traugott 2003:6–7 and 99–100). This progress parallels a cyclical evolution of analytical grammatical systems into agglutinative and later into fusional; and, yet again, from fusional into analytical (Dixon 1994). It also emulates general principles of a linguistic change such as accretion, merger and shrinkage (Lüdtke 1987).[6]

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[6] Some scholars have questioned the unidirectional character of the grammaticalization theory (Campbell 1991 and 2001, Newmeyer 1998, Janda 2001 and Norde 2001). However, since mirror images of grammati-

The above-described—purely structural—progression involves a wide range of more specific changes which may be encompassed under the label of generalization or spread. Among them, the most important one is the increase in frequency which is simultaneously accompanied by a gradual reduction of various semantic, morphological, syntactic and pragmatic constraints (the increase in frequency is also connected to the physical reduction of an entity and, of course, to its morphologization and a final loss). All of these processes reflect a steady expansion of the formation to new environments and situations (Hopper & Traugott 2003:100–106).

One of the most significant implications of such a spreading out process is that the rapidity of functional or semantic (see below, the path theory) progressions of grams is different in different types of text. In particular, the evolutionary advancement is distinct in discourse, in narrative discourse and in narration (Harris 1982 and Squartini & Bertinetto 2000:406). This stems from the fact that novel constructions are initially shaped and regularized in colloquial registers. Only at more developed stages, are they transferred from there to other types of text: first to personal narratives and, then, to properly narrative genders.[7]

2.2. *PATH THEORY*

Path theory provides a model of a functional and semantic growth of grammatical constructions (Bybee, Perkins & Pagliuca 1994). As for the verbal system, it portrays a prearranged and unidirectional semantic progression of verbal entities from lexical semantically transparent, and—if possible—iconic periphrastic chains (Bybee, Perking & Pagliuca 1994:167 and Heine & Kuteva 2007:348) to grammatical categories such as aspect, taxis, tense or mood (Dahl 2000:11–15 and Heine & Kuteva 2007:74–75, 90–91 and 305). It should be noted that once the "peak stage" has been reached, the development does not cease. Quite the reverse, the construction suffers further evolutionary modifications. In particular, its functional load becomes progressively deteriorated. This means that the

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calization process remain typologically unknown, the grammaticalization hypothesis seems to be valid for all languages (Haspelmath 1999, Heine 2003 and Hopper & Traugott 2003).

[7] For example, in respect to the anterior path-law (cf. section 2.2 below), it is a common phenomenon that, in the beginning, resultative formations develop into past tenses in the informal discourse, next in personal narratives (narrative discourse), and only at the end in the narration proper (Squartini & Bertinetto 2000:422). Conversely, the meaning of a *narrative* remote-ancient past tense is the last one in the sequence of stages a resultative gram can acquire. This may be illustrated by the *passé simple* in French (e.g. *j'écrivit* 'I wrote'), a construction which is employed as a past exclusively in the narrative proper. It is never used in colloquial speech or in narrative discourse.

array of uses becomes steadily more restricted, which in turn, leads to a partial or complete loss of the original and previously proto-typical meaning of the formation (cf. the phenomenon of 'dough-nut gram' in Dahl 2000:10–11). At the end, the growing semantic-functional corrosion of the construction causes the gram to be either entirely lost or recycled in new grammatical expressions (Hopper & Traugott 2003:99–129, 154–159 and 172–174, and Croft 2003:252 and 264).

Scholars generally recognize four principal evolutionary tracks which control the creation of aspectual, temporal and modal cate-gories: 1) toward the perfective and past; 2) toward the imperfec-tive and present; 3) toward modal expressions; and 4) toward the future (Dahl 2000:14–15 and Bybee, Perkins & Pagliuca 1994:105, 174–175, 240–241 and 279–280).[8] These evolutionary laws are commonly viewed as typologically universal (Bybee, Perkins & Pagliuca 1994:14–15 and 300–201 and Hopper & Traugott 2003:99–100). They have first been inferred from massive empirical research (cf. for instance, Heine, Claudi & Hünnemeyer 1991a and 1991b, Bybee, Pagliuca & Perkins 1991, Bybee, Perkins & Pagliuca 1994, Dahl 2000 and Heine & Kuteva 2007) and afterwards tested on numerous languages. Only one of these trajectories will be rele-vant in our study, the resultative path. In the next section, we shall provide a detailed description of this evolution scenario.

2.2.1   RESULTATIVE PATH[9]

The resultative path-law describes the order in which original resul-tative locutions incorporate new meanings. This cline, as any uni-versal trail, includes a few more specific sub-trajectories and thus can lead to more than one terminal stage-meaning. The resultative path-law consists of three formative sequences, labeled respectively anterior path, simultaneous path and evidential path. This means that the evolution of resultative inputs may be controlled by the three previously mentioned developmental principles which jointly constitute the resultative path-law.

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[8] The labels employed to classify the four trajectories correspond to apogee phases, i.e., to stages where constructions acquire their utmost functionality equaling central categories of aspect, tense or mood. Howev-er, as already explained, the life of grammatical entities does not conclude there. Quite the contrary, grams continue to develop until they disappear or are reprocessed in new locutions.

[9] I have discussed the evolution of resultative formations in various previously written articles (particularly, in Andrason 2011c, 2011e and 2012b). Thus, this section—without being identical or literally repro-duced—may sometimes approximate portions of other papers.

Anterior Path

Bybee, Perkins & Pagliuca (1994:55–57, 104–105), Dahl (2000:15), Squartini & Bertinetto (2000:406–407) and Heine & Kuteva (2006:151) have demonstrated that resultative proper expressions—when employed with the present time reference—regularly develop into present anteriors (present perfect) and subsequently into definite past tenses. In some cases, the transformation into a past tense, involves a facultative intermediate stage where the formation functions as a perfective past.

The development from a resultative proper expression to a prototypical anterior (present perfect) involves a set of consecutive intermediate phases (see Harris 1982, Squartini & Bertinetto 2000:406–419, Lindstedt 2000:379 and Mitkovska & Bužarovska 2008:136). The resultative input locution first evolves into a resultative anterior,[10] next into an inclusive (also called universal) anterior,[11] afterwards into a frequentative anterior[12] and finally into an experiential anterior.[13] Later the gram acquires an indefinite past value. In this function, the main emphasis is laid on the past action itself (the event expressed by the gram belongs to the past temporal sphere; Depraetere & Reed 2000:97) without, however, situating it at a definite moment in the past (Lindstedt 2000:369 and 379).[14] This indefinite past value is a linking stage between the prototypical anterior (present perfect) and prototypical past uses.

There is also a semantic relationship between resultative expressions and the performative value. This connection has been

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[10] In this function, the static meaning is weakened and the construction—increasing the inference of anteriority—acquires a more dynamic fientive character (Mitkovska & Bužarovska 2008:132). On the other hand, although the gram explicitly indicates a dynamic previous event, it still connotes the relevance of that event for the present state of affairs, cf. for example *I cannot come to your party—I have caught the flu*, (McCawley 1971, Jónsson 1992:129–145 and Squartini & Bertinetto 2000:407).

[11] The inclusive anterior indicates activities which continue without ceasing from a determined moment in the past to the present time, e.g., *I have known Max since 1960* (cf. Jónsson 1992:129–145) or *I have known him for 10 years*.

[12] See, for instance, the Portuguese perfect *Ultimamente o João tem lido muitos romances* 'Recently John has read many novels' (Squartini & Bertinetto 2000:409).

[13] The experiential anterior presents an event as a personal experience which occurred at least once (Jónsson 1992:129–145), e.g. *I have read 'Principia Mathematica' five times* (Jónsson 1992:129), *I have never read that book* and *Have you ever been to China*?

[14] Furthermore, the progression towards the prototypical anterior (perfect) and subsequently toward a past implies that the relevance of the previously performed action for the present state of affairs becomes gradually less evident. In other words, as the (present) resultative develops, the current relevance of the expression diminishes until it is entirely lost and the gram is converted into a past (Lindstedt 2000:365-366 and 369-371).

commonly recognized (e.g. Nedjalkov 1988:415, Volodin 1988:473 and Streck 1995) and recently determined, as well as geometrically situated, on the anterior path by Andrason (2011f). He has demonstrated that with the progress along the cline, the capacity to convey performative meaning diminishes. The performative function vanishes before the loss of the resultative perfect value and after the loss of the resultative proper meaning. Consequently, the performative stage should be located at an initial portion of the trajectory, between the phase of a resultative proper and that of a resultative perfect (for the entire argumentation, see Andrason 2011f).

When the anterior gram becomes acceptable with an explicit past reference—imposed by past time adverbials, by phrasal expressions or by a general context—it consequently acquires the value of a definite past tense. Then, as a past tense, it gradually increases the degree of remoteness (temporal distance), moving away from the enunciator's now-and-here (Bybee, Perkins & Pagliuca 1994:98, Squartini & Bertinetto 2000:414–417 and 422). In other words, the construction increasingly expresses more and more temporally distant past episodes and activities. First, it functions as a near past (immediate, hodiernal, hesternal and recent past), finally developing into a general past and remote (ancient) past.

We have mentioned above that during their transformation into definite past forms certain anterior grams acquire an aspectual perfective sense. This usually happens in languages which include in their verbal repertoire a—historically older—simple or imperfective past formation (Bybee, Perkins & Pagliuca 2000:81–87). Put differently, the conversion of the anterior into a definite past occurs in contrast with another past expression (see also Drinka 1998:120). This contrast is responsible for the aspectual marking of the younger gram, i.e. of an anterior which evolves into a past. At a subsequent phase, perfective past constructions may abandon their aspectual value and acquire a simple past sense (Bybee, Perkins & Pagliuca 1994:992–93). However in various languages, the emergence of the definite simple past does not require an intermediate perfective past stage. In that case, the indefinite anterior directly develops into the simple (aspectually neutral) definite past (Bybee, Perkins & Pagliuca 1994:83–86 and Heine & Kuteva 2006:151).[15] It

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[15] Resultative expressions may also evolve with the past and future temporal reference giving rise to past anteriors (pluperfects) and future anteriors (future perfects). These two formations may subsequently loose their taxis connotation and develop into tenses, remote past and simple future respectively. The use of the pluperfect as a remote past may be illustrated by the Old Polish expression, *zrobił jeś był*. In Old Polish, this analytic locution had partially lost its taxis character and could be employed to indicate past remote activities (Dlugosz-Kurczabowa & Dubisz 2003:309). An instance of the anterior path in the future time frame can be exemplified by another Polish formation, the periphrastic simple future

should be noted that the rise of the perfective past and its transformation into a non-aspectual variant is both a concurrent and independent process if compared with the increase of the temporal remoteness. Consequently, there is no unambiguous stage-to-stage equivalence between the phases which span from the indefinite perfect/past or to the definite past (from immediate to remote and ancient) on the one hand, and the conversion of the perfective past into its aspectually neutral alternative, on the other.

Suma sumarum, we may propose the following comprehensive representation of the development of resultative constructions within the present time frame (Figure 1):
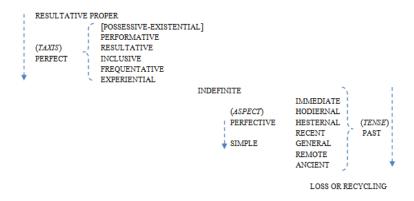

Figure 1: The anterior path-law within the present time frame[16]

Simultaneous Path

The simultaneous path depicts a gradual transformation of resultative inputs—if employed with the present time reference—into present tenses. This law parallels the previously introduced development codified by the anterior trajectory. The difference consists in the fact that, this time, the final product of the cline is not the definite past, but rather the present tense (cf. Maslov 1988:70–71, Bybee, Perkins & Pagliuca 1994:74–78 and Drinka 1998:120). Nevertheless—apart from triggering two different temporal outcomes—both trajectories traverse the verbal domains of taxis, aspect and tense in a similar sequence: viz. from the taxis (simultaneous resultative present)[17] through the aspect (stative present)[18]

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tense which derives from an original resultative-anterior future expression (Długosz-Kurczabowa & Dubisz 2003:310).

[16] The vertical arrows in this figure represent a diachronic progression of grams. It should again be noted that the development from the perfective past to the simple past is facultative.

[17] Simultaneous taxis grams emphasize a resulting static condition which is concurrent with the main reference time. However, the co-meaning corresponding to an event which has led to the present situation is still available.

towards the tense (present)[19] (see Figure 2 below; for a detailed discussion of the simultaneous path see Andrason 2010b and especially Andrason 2011d). Consequently, in course of the simultaneous path—as was the case during the anterior track—the development corresponds to a gradual conversion of resultative proper grams into expressions of taxis, aspect and tense (cf. Maslov 1988:70–72, Nedjalkov & Jaxontov 1988, Bybee, Perkins & Pagliuca 1994:51–150, Drinka 1998:119–120, Dahl 2000:14–15, Squartini & Bertinetto 2000:406–407, 417–422, 425–426, Lindstedt 2000:366–374 and Andrason 2010d:338–340).[20] As noted by Bybee, Perkins & Pagliuca (1994:74–78), the evolution along the simultaneous cline usually affects static predicates or verbs whose resultative uses can logically trigger a static reading.[21]

The here-presented sequence of the stages during the conversion of resultative inputs into present tenses does not reflect the standard path theory as posited by Bybee, Perkins & Pagliuca (1994), but has been built on the typological research conducted by the author in 2010 and recently presented in the article "From resultatives to Present Tenses—Simultaneous Path of resultative Constructions" (cf. Andrason 2011d). Thus far, scholars limited themselves to note a close relation between resultative-perfect-past morphologies and stative-present meanings (and the resultative foundation of some statives and presents) without providing a

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[18] During this stage, the connection between the achieved state and the activity, which constitutes its origin, is lost. The gram exclusively expresses the idea of an acquired condition, with no connotation of the anterior action. This means that an original resultative construction loses its previously typical taxis character. What remains is the value of a non-dynamic state. In the discourse and spheres located in a close cognitive proximity to the speaker, statives most frequently approximate stative presents. Following Maslov (1988:67), the stative is understood as an aspectual type, contrasting with a simple present.

[19] Within with the present time frame, at the moment where the aspectual stative value is no longer palpable, the formation develops into a definite present tense. The most exemplary case of a resultative construction which has evolved to the peak stage of the simultaneous path is provided by Germanic preterite-present verbs (Bybee, Perkins & Pagliuca 1994:77-78).

[20] This evolutionary scenario is consistent with a typologically universal progression leading to the formation of central verbal categories, whereby taxis expressions develop into aspects, which in turn regularly evolve into tenses (cf. for instance, the imperfective path in Bybee, Perkins & Pagliuca 1994, see also Dahl 2000:11-15 and Heine & Kuteva 2007:74-75, 90-91 and 305).

[21] On the contrary, the pure resultative value—which subsequently leads towards meanings located on the anterior path—is usually compatible only with dynamic predicates that indicate a change of state or an event that produces such a change of state (Bybee, Perkins & Pagliuca 1994:65 and 69).

specific rule and/or detailed evolutionary scenario which could explain such a connection and origin.
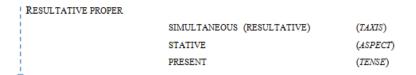
RESULTATIVE PROPER

SIMULTANEOUS (RESULTATIVE)		(*TAXIS*)
STATIVE		(*ASPECT*)
PRESENT		(*TENSE*)

Figure 2: The simultaneous path-law within the present time frame[22]

Evidential Path

Besides the two above-mentioned evolutionary scenarios which govern the grammatical life of resultative locutions, it is possible to identify a third developmental trajectory along which such expressions may advance. This pathway is referred to as the evidential path.

The evidential track controls the order in which resultative constructions are converted into modal evidential categories. Resultative proper formations regularly indicate current—simultaneous to the speaker's here-and-now—static products of formerly performed actions. Such a resulting state, emerging from a previously achieved activity, is invariably understood as relevant to the cognitive sphere of the enunciator (speaker's here-and-now, cf. Comrie 1976 and Johanson 2000). Gradually, this initial sense is colored by inferential or indirect connotations. The enunciator, noticing available results and employing general deductive capacity, may infer that a former action *must have* occurred although he himself has not witnessed it (inferential based on physical traces).[23] At the subsequent phase, the inference can also be based on a general conjecture or on hearsays.[24] After that, the gram develops reportative and referential meanings. Finally, the formation may introduce a broad variety of non-first hand values, approximating thus a general, properly evidential, gram (Aikhenvald 2004:112–117 and 279–281).[25] When the original resultative construction has reached this fourth evolutionary stage, it can develop further epistemic uses,

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[22] The vertical arrow in this figure represents a diachronic progression.

[23] This inferential meaning of resultatives and perfects is a typologically common phenomenon. It may be found, for instance, in Nordic Germanic languages—e.g. in Swedish and Icelandic—where the 'have' perfect (a descendent from an earlier possessive resultative expression) can function as an inferential *guessing* gram (Haugen 1972, Jónsson 1992 and Lindstedt 2000).

[24] Cf. the Persian 'distanced past' (Lazard 1985).

[25] Such advanced stages of the development may be illustrated by the Turkish evidential *miş*-perfect (Johanson 2003) or by the Macedonian perfect in *l* (Lindstedt 2000).

functioning as a non-indicative mood of probability and doubt (Aikhenvald 2004:116 and Andrason 2010b). The evidential path-law can be illustrated by the following figure:

Figure 3: Evidential development of resultative constructions[26]

2.2.2. *COGNITIVE MOTIVATION*

One of the important claims of path theory is that grammatical constructions tend to originate in semantically transparent and possibly iconic locutions (Heine and Kuteva 2007:348, cf. also Van Langendock 2007:396, 401–2 and Heiman 1985:8 and 18). These assumptions are necessary consequences of the principles of cognitive linguistics according to which grammar is the literal or metaphorical conceptualization of a person's experience. This means that the shape of a formation must somehow be related to its function (Croft and Cruse 2004:1–3, cf. also Heine and Kuteva 2007:58 and 348). Furthermore, it stands in harmony with another idea defended by cognitive scholars who affirm that lexicon and the inner, narrowly understood, grammar of a language cannot be categorically separated. Quite the reverse, they form a diffuse indissoluble continuum (Croft and Cruse 2004:255–6 and Langacker 2007:421–2).

What is relevant for the above explained universal clines is the fact that such input expressions must be semantically and functionally consistent with the entire evolutionary growth of a given formation. In other words, they are required to be cognitively plausible for the gram and its total development. The initial periphrasis is expected to motivate all values offered by the gram during its grammatical life and conversely all meanings should be derivable from the original expression (cf. source determination in Bybee, Perkins and Pagliuca 1994:9–12). In consequence, the form of a gram either directly stimulates its functional load or can be reduced to the input which does so.

3. METHODOLOGY OF THE DESCRIPTION

In the present section, we will explain how it is possible to employ evolutionary—diachronic—principles to a synchronic analysis of languages.

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[26] The vertical arrow in this figure symbolizes the diachronic progression of a gram.

3.1. DYNAMIC VIEW OF SYNCHRONIC PHENOMENA

The two typically diachronic frameworks, viz. grammaticalization and path theories—understood as a combination of deterministic, unidirectional and universal laws (Bybee, Perkins & Pagliuca 1994 and Hopper & Traugott 2003)—correspond to non-realistic laws which in an idealized manner formalize the orderliness of incorporation and loss of new meaning during the evolution of grams. They are universal and deterministic exclusively in the sense that they control evolutionary processes. They govern the series of integrated and lost meanings. On the other hand, they systematically fail to describe—and more importantly predict—real developments. This is due to the fact that stages on clines do not represent concrete grams at consecutive historical moments. Observe, for instance, that grammatical formations do not "jump" from one phase to another as we could infer from the model of trajectories. Real-world constructions amass meanings which parallel various stages on a pathway. This accumulation of stages-meanings is referred to as a 'state'. Paths, however, say nothing about how the values are arranged—they keep completely silent in respect to states. Consequently, they do not summarize all typologically possible behaviors a given linguistic input may display—they rather present generalized and fictionalized imperatives governing realistic developments (for a comprehensive discussion of this fact and the approximation of language evolution to chaos theory, see Andrason forthcoming 2011e). Are thus universal trajectories irrelevant and needless in description of realistic evolutionary situations, i.e. grams at given historical époques?

As mentioned above, real developments correspond to sequences of states, defined as complex sets of various properties (semantic, functional, morphological etc.). If the path and grammaticalization theories are correct, these states must arise following the rules established by the two frameworks. In other words, semantic and structural values are stored in accordance with the principles governing language evolution. This fact consequently enables us to employ unrealistic path-laws to determine the potential of real developmental cases, and hence determine the synchronic potential of a given gram. We can define a synchronically viewed gram employing the diachronic terminology governing its evolution—this application of diachronic rules to a synchronic description is what we will refer to as 'panchrony' (see section 3.2) below.

Consequently, the total potential of a gram reflects subsequent stages on a given trajectory. Due to the fact that an exemplary progression traverses several semantic fields—such as, for instance, taxis, aspect, tense and mood—and is also connected to certain pragmatic factors, a grammatical item cannot be limited to *one* synchronic value. Quite the contrary, it necessarily comprises a large set of different functions. Some of them match original portions of the development (values gradually abandoned by the gram in question and expressed by new transparent constructions, cf. donut

grams in Dahl 2000:10–11 and Bybee, Perkins & Pagliuca 1994:21–
22). Others, on the other hand, correspond to advanced segments
of a given cline. These values, despite not having been generalized
yet, will become prevailing at a later historical period. In between
the two edges of a path, the prototypical and most frequent mean-
ings of the formation are located. Thus, the semantic potential of a
construction—at any moment of its evolution—is an amalgamation
of consecutive phases on a given path. More precisely, the inherent
sense of a gram is a computation of different values which are
equivalent to subsequent diachronic stages.

As a result, the concept of an invariant dominant meaning
must be abandoned. First, the evolutionary dynamic view nullifies a
clear-cut borderline between conventional and contextual interpre-
tations (Dahl 2004:14). The intrinsic value of a formation is a sum
of all of its uses in all possible environments. A gram is always a
gram in a context, and linguistic entities develop new characteristics
in concrete situations (Dahl 2000:14, Hopper & Traugott 2003:100
and Heine & Kuteva 2007:35–37). It is hence inaccurate to classify
a given construction as a phenomenon x (for example, a perfective
past), and then "draw" from it the remaining values. All values are
equally important because all of them together form the semantic
area inherent to a construction.[27]

Furthermore, in light of the dynamic evolutionary approach a
description in terms of binary oppositions appears as inadequate.
Grammatical items evolve from their lexical foundation in a wave-
like manner suffering furthermore a permanent influence of other
grams-paths. Metaphorically, they pursue each other along a path
of development and interact with other grams-paths (Dahl
2000:13). Thus, instead of a bipolar opposition, we should talk
about an interaction between older and younger constructions on
the same evolutionary track, and a relation which connects a given
trajectory and other pathways in the system.

Paths are not contrastive phenomena. Without doubt, they
conduct to different semantic apogees (e.g. to the present, past,
future or moods), but they do not constitute dichotomies. As ex-
plained above, a gram at a given historical moment may be defined
as a computation of meanings which match various—and not
one—consecutive stages on a path. Hence, the contrast between
two formations includes several semantic areas. It may never be
simplified or reduced to an opposition between two domains only.

Since languages do not show a system of clear-cut contrasts
organized in accordance with the rules of economy and symmetry,
the orthodox structuralist claim whereby "each language represents

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[27] Cf. however the discussion in the last section of the paper, 5.3 *Weak points and future research*. Uses and meanings displayed by a gram may differ in frequency. Thus, their statistical weight is not identical: some are proto-typical (common) while others are peripheral (rare).

a tidy system in which units are defined by the oppositions they enter into" is no longer sustainable (Bybee, Perkins & Pagliuca 1994:1 and 300).

To conclude, we may affirm that the evolutionary approach necessarily yields a dynamic view of linguistic systems. In this view, synchronic constructions must receive energetic, restless and diachronic interpretations. They should be understood as materializations of historical motions because they are inevitable computations of what they were, of what they are, and of what they will become.

3.2. PANCHRONY

Panchrony is a methodology which provides a synchronic definition of a gram making use of its diachronic properties. In other words, a synchronic description is expressed in dynamic evolutionary terms: a grammatical entity is equaled with a portion of its own history. This is possible due to the fact that any grammatical growth consists in an ordered acquisition of new values and formal properties (Dahl 2000:8–15 and Bybee, Perkins & Pagliuca 1994:9–26). Consequently, semantic, functional and structural characteristics synchronically provided by a gram may be matched with evolutionary stages—the gram may be viewed as a synchronic manifestation of its own diachronic development. Each historical phase is responsible for a given meaning because during each one of these phases, a new value was incorporated. Moreover, since the grammatical evolution is unidirectional, a set of meanings and formal qualities provided by a formation may be ordered into a linear progression that would parallel one of the universal trajectories posited by Path and Grammaticalization theories (Heine, Claudi & Hünnemeyer 1991b:248–249, 251–261). It should be emphasized that the panchronic method is aimed at analyzing synchronic entities providing their dynamic definitions—thus, the purpose of the method is to improve synchronic description of a language rather than elucidate its evolution.

The formulation of a panchronic definition starts with elaborating an exhaustive taxonomy of synchronically provided aspectual, taxis, temporal, modal, textual and pragmatic values m_a, m_b, m_c... m_z.[28] Subsequently, this synchronic inventory of uses should be arranged into a linear cline which corresponds to one (or more) of the universal trajectories. This possibility, labeled 'orderliness principle', is granted by the abductive method (cf. section 3.3). As a result, the previously attested meanings m_a, m_b, m_c... m_z can be ordered into a unidirectional and universal series m_1, m_2, m_3... m_n, a portion of a path. Consequently, semantic, functional and formal

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[28] The indexation of the meanings *m* as m_a, m_b, m_c ... m_n does not refer to any specific order but reflects a mere inventory of all available uses offered by the gram.

properties of the gram—which from the traditional synchronic perspective appear as unrelated and chaotic—are portrayed as a consistent phenomenon: an evolutionary cline. Given that the hypothesized classification (i.e., the portion of a path) has been achieved analyzing synchronic evidence, this step of the panchronic methodology is referred to as 'synchronic panchrony'. Synchronic panchrony equals what linguists label 'dynamization of typology' (Croft 2003:235). However, the panchronic method, in its totality, may not be equaled with deduction of diachrony from synchrony or reduction of synchrony to diachrony. Panchrony explains synchronic phenomena in diachronic terms—it is a *combination* of diachrony and synchrony.

In some cases, analogical phonological and morphological processes may render the synchronic evidence misleading. Therefore, it is indispensable to contrast the panchronic proposal—inferred from synchronic data—with diachronic and comparative evidence. Diachronic panchrony requires that values of a construction attested in different historical époques should coincide with the previously hypothesized cline. More specifically, properties documented at former and posterior periods of the development (i.e. at historically earlier and later epochs) should match, respectively, less and more advanced stages of the trajectory. Diachronic evidence is furthermore expected to determine the input expression from which the gram has arisen. This enter-locution should express original meanings (i.e. which correspond to initial portions of the path) in a transparent, typologically regular and, if possible, iconic manner. Qualities of the gram attested at posterior historical periods simply reflect a regular advancement of an original semantically transparent and iconic expression. This means that the input formation is required to motivate the entire track, and thus all the meanings offered by the gram. Consequently, the shape of a construction must somehow be related to its semantic potential, defined in dynamic terms as a portion of a path (cf. Andrason 2012c).[29]

Finally, the comparative panchrony is expected to provide a definitive confirmation of the hypothesis. In particular, properties

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[29] For instance, if a gram has been defined as an imperfective trajectory, we should be able to match its original continuative or iterative meaning (which corresponds to initial stages on the path) with a semantically transparent, possibly iconic and typologically standard source. This input expression should convey the original value in a *natural* manner and thus constitute a cognitively solid starting point of the entire path. Such a sound motivation may be encountered in reduplicative locutions because reduplication is universally employed in order to convey the idea of plurality of an event which in the verbal system surfaces as the concept of repetitivity (iterativity, uninterruptness and continuity) (see for detail Bybee, Perkins and Pagliuca 1994:161, 166-174, and Andrason 2012c forthcoming).

offered by genetically related grams, in languages belonging to the same family, should be reducible to the same trajectory—their semantic and functional properties must correspond to consecutive stages on the same evolutionary path.

If and only if the three types of the panchronic methodology coincide and advocate for the same cline, we obtain a new synchronically valid dynamic definition of a gram: a state of a gram g_a is a portion of a path p_a or a sum of portions of a path p_a and paths $p_b \ldots p_x$ (for details of the panchronic methodology, its history and relation to the concept of dynamization of typology see Andrason 2010a).

3.3. *ABDUCTION*

As described above, the panchronic method permits us to embrace all supposedly irreconcilable and heterogeneous functions of a construction, and explain them as a homogenous manifestation of a certain diachronic trajectory. In other words, the gram which, from the orthodox synchronic perspective, seems to display haphazard values, apparently impossible to be classified with a unique and exclusive label (such as aspect, tense, taxis, or mood), may be understood as a prototypical uniform diachrony and thus, as a single logical object. In that manner, one obtains a consistent and scientifically manageable definition of a formation without simplifying its nature and, no less in importance, without limiting the analysis to mere taxonomy.

Superficial irregularities and exceptions may be defined, from the dynamic point of view, as evolutionary atavisms. They witness a situation and properties which were typical at earlier developmental phases, but which contemporarily appear as infrequent. In that manner, their exceptionality and anomaly disappears. Quite the reverse, they are compatible with a trajectory along which the construction has been evolving and with which it has been identified. Superficial "exceptional" properties and uses rather *confirm* a definition of the gram in terms of a given path, than constitute real anomalies. Paradoxically, they may significantly help in determining the trajectory.[30]

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[30] For instance, the synthetic future tense in Spanish is most frequently employed as a simple future. However in some cases, it does not provide temporal implications but rather a modal reading of epistemic possibility. Such modal uses are not irregular from the evolutionary perspective and within the panchronic view. They simply reflect a more original stage of the development of the gram, during which the construction regularly displayed a strong modal value. This modal tone is evident in the original periphrasis from which the Spanish category derived [infinitive + *habeo*] with the meaning 'I have to do something' (Hopper & Traugott 2003:52-55).

Such a dynamic definition, as well as the panchronic methodology itself, is constructed upon the orderliness principle: an assumption whereby superficially unrelated facts (various meanings, different and contradictory functions, structural properties, etc.) *must* be explainable as elements forming a solid consistent picture. We presuppose their interwoveness and connection because they are parts of a single linguistic phenomenon, a gram. In that way, we propose a rationalization and justification of properties which superficially seem to be chaotic and unrelated. In the scientific literature, this type of argumentation is referred to as 'abduction' (Carstairs-McCarthy 2010:4).

The notion 'abduction' was first introduced by Peirce (e.g. 1931–1935 and 1940:150–156). This type of reasoning sometimes receives alternative labels, such as for instance 'inference to the best explanation' (Lipton 1991, Josephson & Josephson 1994 and Carstairs-McCarthy 2010:4–5). The abductive argumentation and thinking may be exemplified as follows. Let first us assume that there is a hypothesis to be verified. If a proposition (e.g., a law) p is true, given other fixed assumptions or facts, we expect to detect q, r, s, t. On the contrary, if p is false, the connection between the facts q, r, s, t disappears. The evidence shows that the posited statements q, r, s, t are all true. Hence "[t]he likelihood that p is true is […] increased, inasmuch as it explains the otherwise random coexistence of q, r, s, t…." (Carstairs-McCarthy 2010:4).[31]

Consequently, abduction enables us to systematically treat data appearing, otherwise, as random and unconnected. It bestows us with a possibility to present superficially disorganized and messy facts in a holistic and, equally importantly, economical manner (Peirce 1902:37–38).

4.   PANCHRONIC ANALYSIS OF THE *WAYYIQTOL*

In the present section, we will describe the *wayyiqtol* applying the panchronic methodology. To begin with, in section 4.1 dedicated to synchronic panchrony, the taxonomy of its uses as recorded in biblical texts will be studied. After that, a rationalization of the inventory of values will be proposed in terms of a portion of a universal path. This definition, built on synchronic evidence, will subsequently—as required by our methodology—be contrasted with diachronic (4.2) and comparative (4.3) evidence.

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[31] For a detailed discussion of abduction see Andersen (1973).

4.1. SYNCHRONIC PANCHRONY

4.1.1. TAXONOMY OF USES OF THE WAYYIQTOL[32]

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[32] The "objective" inventory of uses of the *wayyiqtol* illustrated by approximately fifty examples is notably based on the grammatical tradition (in particular on Joüon 1923, Rundgren 1961, Waltke & O'Connor 1990, Joüon & Muraoka 1991, Buth 1992, Longacre 1992, Joosten 1992 and 2002, Andersen 2000, Van der Merwe, Naudé & Kroeze 2000, and Cook 2002). This means that we present meanings which not only have been detected by the author of the article but also are commonly recognized in classical or modern grammar books (although sometimes hidden under different terms). However, since the totality of instances of the *wayyiqtol* form amounts to approx. 15,000, our examples are exclusively intended to be illustrative. The distribution of the detected meanings and, thus, the analysis of a significantly more numerous set of samples will be provided by the future statistical research (see section 5.3 below).

The objectiveness of such an inventory should also be taken with caution since any taxonomy always triggers an artificial partition of the actual reality. The unquestionable physical fact is that there are about 15.000 instances of the *wayyiqtol* in the Hebrew Bible. This is because there are no two identical contexts (for at a final degree, they must differ in some pragmatic, textual or physical aspects due to the fact that life is a thermodynamic process, Schneider & Sagan 2009:185-204). Since the meaning is a sense that the construction conveys in a given context, at a certain level of analysis, every single use will receive a different meaning. Thus, 15,000 cases of the gram will generate 15,000 distinct meanings. Furthermore, because the total meaning of the gram is a computation of all specific values (i.e. of meanings conveyed in concrete uses), if we wish to present the *wayyiqtol* (define it or explain its overall meaning) in an absolutely accurate manner, faithfully according to the objective reality, we would have to provide all 15.000 examples and impartially state: "this is what the *wayyiqtol* is". However, we cannot deal with the reality in such a crude and impartial form, i.e. as it appears. We must structure it through conceptualization and categorization. We divide the real world into boxes, i.e. concepts. In the present paper, the entire semantic potential of the *wayyiqtol* will be partitioned into conceptual boxes (meanings) which correspond to stages on universal paths. Thus, we begin our study with the following presupposition: the overall meaning of a construction can be split into smaller individuals—these individuals are categories established by the Path and Grammaticalization theories. This variety of partition and, thus, of categorization is a logical consequence of the evolutionary model employed in the article (as explained, derived from the Path and Grammaticalization theories). We use the terminology "prepared" and appropriate for the type of analysis we are aiming to conduct. In that manner, the identification of the gram with a determined trajectory becomes significantly less complicated.

Nevertheless, this does not exclude that a different division and categorization of the reality (i.e., of the total semantic load of the *wayyiqtol*) could be possible. Since imposing a conceptual order in a portion of the reality is *our* task, there may be an infinite number of possible partitions.

From the functional-semantic perspective, the *wayyiqtol* is a quite complex formation—it displays uses that correspond to the concepts of tense, aspect, taxis, modal and text type, as well as those accompanied by other nuances such as consecution. In the present part, we will describe all meanings which the gram may provide dividing them into five main blocs: consecution, taxis-tense, aspect, mood and discourse-pragmatics.[33]

The *wayyiqtol* may express logically and/or temporarily consecutive actions which are usually anterior to the present time sphere.

(2) a. וְהָֽאָדָ֔ם יָדַ֖ע אֶת־חַוָּ֣ה אִשְׁתּ֑וֹ **וַתַּ֙הַר֙ וַתֵּ֣לֶד** אֶת־קַ֔יִן וַתֹּ֕אמֶר
קָנִ֥יתִי אִ֖ישׁ אֶת־יְהוָֽה

Now the man knew his wife Eve, and she **conceived** and **bore** Cain, saying, "I have produced a man with the help of the LORD." (Gen 4.1)

b. **וַיִּ֩יצֶר֩** יְהוָ֨ה אֱלֹהִ֜ים אֶת־הָֽאָדָ֗ם עָפָר֙ מִן־הָ֣אֲדָמָ֔ה **וַיִּפַּ֥ח** בְּאַפָּ֖יו
נִשְׁמַ֣ת חַיִּ֑ים **וַֽיְהִ֥י** הָֽאָדָ֖ם לְנֶ֥פֶשׁ חַיָּֽה

Then the Lord God **formed** man from the dust of the ground, and **breathed** into his nostrils the breath of life; and the man **became** a living being. (Gen 2.7)

This consecutive value may also surface as resumption or summary.

(3) a. **וַיְכֻלּ֛וּ** הַשָּׁמַ֥יִם וְהָאָ֖רֶץ וְכָל־צְבָאָֽם

Thus the heavens and the earth **were finished**, and all their multitude. (Gen 2.1)

b. **וַיִּקְרָ֞א** שֵֽׁם־הַמָּק֤וֹם הַהוּא֙ גִּלְגָּ֔ל עַ֖ד הַיּ֥וֹם הַזֶּֽה

Some of them are more workable and more useful for a given type of explanation. No one, however, is *per se* and *a priori* "better". (As defended by modern mathematical, physical and biological theories, the reality is significantly more chaotic, structurally diffuse and exposed to randomness. Scientific laws are human inventions, probably not inherent to the reality itself. More specifically, determinism, with its probability equaling 1, is restricted to artificial laws. Natural phenomena, due to their complexity and to the incompleteness of any axiomatic theory, proven by Gödel's theorem, are partially exposed to randomness. Modern sciences have reversed the classical paradigm. Nowadays, natural means irreversible and random. On the contrary, deterministic and reversible phenomena or rules are viewed as artificial and exceptional; Wagensberg 2007:12, 27, 56-57, 60-62).

[33] Although the Biblical text is not historically homogenous (it includes parts of different antiquity), we will treat the BH evidence as a synchronic whole.

And so that place **has been called** Gilgal to this day. (Josh 5.9)

However, it should be noted that in various cases, the idea of succession is not available or, at least, seems not to play any relevant role.

(4) הֲלֹא־הֻגַּ֣ד לַֽאדֹנִ֗י אֵ֤ת אֲשֶׁר־עָשִׂ֙יתִי֙ בַּהֲרֹ֣ג אִיזֶ֔בֶל אֵ֖ת נְבִיאֵ֣י
יְהוָ֑ה **וָאַחְבִּא** מִנְּבִיאֵ֣י יְהוָ֗ה מֵ֤אָה אִישׁ֙ חֲמִשִּׁ֣ים חֲמִשִּׁ֣ים אִ֔ישׁ
בַּמְּעָרָ֔ה **וָאֲכַלְכְּלֵ֖ם** לֶ֥חֶם וָמָֽיִם

> Has it not been told my lord what I did when Jezebel killed the prophets of the LORD, how I **hid** a hundred of the LORD's prophets fifty to a cave, and **provided** them with bread and water? (1 Kgs 18.13)

As far as the concept of taxis is concerned, the construction may function as an anterior (a perfect). In this use, with the present temporal reference, it approximates a present perfect providing various prototypical perfect meanings such as resultative (5.a and 5.b), inclusive-universal (5.c, 5.d and 5.e), iterative (5.f), experiential (5.g) and indefinite (5.h).[34]

(5) a. וַיֹּ֤אמֶר לָבָן֙ לְיַעֲקֹ֔ב מֶ֣ה עָשִׂ֔יתָ **וַתִּגְנֹ֖ב** אֶת־לְבָבִ֑י **וַתְּנַהֵג֙**
אֶת־בְּנֹתַ֔י כִּשְׁבֻי֖וֹת חָֽרֶב

> Laban said to Jacob, "What have you done? You **have deceived** me, and **carried** away my daughters like captives of the sword. (Gen 31.26)

b. (2) רְאֵ֖ה קָרָ֣אתִֽי בְשֵׁ֑ם בְּצַלְאֵ֛ל בֶּן־אוּרִ֥י בֶן־ח֖וּר לְמַטֵּ֥ה יְהוּדָֽה
(3) **וָאֲמַלֵּ֣א** אֹת֗וֹ ר֣וּחַ אֱלֹהִ֑ים בְּחָכְמָ֛ה וּבִתְבוּנָ֥ה וּבְדַ֖עַת
וּבְכָל־מְלָאכָֽה

> [2]See, I have called by name Bezalel son of Uri son of Hur, of the tribe of Judah: [3]and I **have filled** him with divine spirit,

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[34] When we say that the *wayyiqtol* functions as a given category or provides certain meanings, we mean that it is compatible with that particular value or function. As explained in section 3.1 above, in the dynamic view there is no distinction between the inherent meaning and contextual realizations (see also Dahl 2004:14). The context simply makes evident a given part of the semantic potential of the gram (cf., for instance, the use of adverbial locutions in 5.c, 5.d, 5.e, 5.f, 12.a and 12.b which make explicit particular values of the *wayyiqtol*). The "inherent" meaning of the formation is a computation (corresponding to the arithmetic summation Σ or the union ∪ in the Set Theory) of all specific values displayed by the gram, i.e. it equals the sum of uses which are compatible with a determined set of possible contexts in which the constructions appears. The "inherent" meaning of a gram is a portion of the path with which the formation has been identified.

with ability, intelligence, and knowledge in every kind of craft
(Exod 31.2–3)

c.   וּשְׁתֵּים עֶשְׂרֵה אֲבָנִים הֵקִים יְהוֹשֻׁעַ בְּתוֹךְ הַיַּרְדֵּן תַּחַת מַצַּב
רַגְלֵי הַכֹּהֲנִים נֹשְׂאֵי אֲרוֹן הַבְּרִית **וַיִּהְיוּ** שָׁם עַד הַיּוֹם הַזֶּה

Joshua set up twelve stones in the middle of the Jordan, in the
place where the feet of the priests bearing the ark of the cove-
nant had stood; and they **have been** there to this day. (Josh
4.9)

d.   עַבְדְּךָ יַעֲקֹב עִם־לָבָן גַּרְתִּי **וָאֵחַר** עַד־עָתָּה

I have lived with Laban as an alien, and [I **have**] **stayed** until
now. (Gen 32.5)

e.   **וָאֶהְיֶה** עִמְּךָ בְּכֹל אֲשֶׁר הָלַכְתָּ

And I **have been** with you wherever you have gone (2 Sam
7.9)

f.   **וַתַּחֲלֵף** אֶת־מַשְׂכֻּרְתִּי עֲשֶׂרֶת מֹנִים

…and you **have changed** my wages ten times. (Gen 31.41)

g.   הֲשָׁמַע עָם קוֹל אֱלֹהִים מְדַבֵּר מִתּוֹךְ־הָאֵשׁ כַּאֲשֶׁר־שָׁמַעְתָּ
אַתָּה **וַיֶּחִי**

Has any people ever heard the voice of a god speaking out of a
fire, as you have heard, and [**has**] **lived**? (Deut 4.33)

h.   יַעַן מָאַסְתָּ אֶת־דְּבַר יְהוָה **וַיִּמְאָסְךָ** מִמֶּלֶךְ

Because you have rejected the word of the LORD, he **has** also
rejected you from being king. (1 Sam 15.23)

In the past time frame, the *wayyiqtol* can function as a past anterior,
i.e. a pluperfect, introducing events that precede other past activi-
ties (6):

(6) a. ⁽¹³⁾ וַיְהִי כִּרְאוֹתָהּ כִּי־עָזַב בִּגְדוֹ בְּיָדָהּ **וַיָּנָס** הַחוּצָה

⁽¹⁴⁾ וַתִּקְרָא

¹³When she saw that he had left his garment in her hand and
had fled outside, ¹⁴ she called… (Gen 39.13–14)

b.   וְרָחֵל לָקְחָה אֶת־הַתְּרָפִים **וַתְּשִׂמֵם** בְּכַר הַגָּמָל **וַתֵּשֶׁב** עֲלֵיהֶם
וַיְמַשֵּׁשׁ לָבָן אֶת־כָּל־הָאֹהֶל וְלֹא מָצָא:

Now Rachel had taken the household gods and [**had**] **put**
them in the camel's saddle, and [**had**] **sat** on them. Laban felt
all about in the tent, but did not find them. (Gen 31.34).

c.   וְהַלְוִיִּם לְמַטֵּה אֲבֹתָם לֹא הָתְפָּקְדוּ בְּתוֹכָם:

וַיְדַבֵּר יְהוָה אֶל־מֹשֶׁה לֵּאמֹר:

[47]The Levites, however, were not numbered by their ancestral tribe along with them. [48] The LORD **had said** to Moses… (Num 1.47–48)

As for the temporal value of the construction (tense), it may be employed as a past: recent past (7.a and 7.b), general past (7.c), or historic-remote past (7.d and 7.e). It this function, the *wayyiqtol* introduces definite past events, appearing thus in explicit past contexts, for instance with past temporal adverbials.

(7) a. **וָאָבֹא** הַיּוֹם אֶל־הָעָיִן וָאֹמַר

I **came** today to the spring, and said… (Gen 24.42)

b. **וַיַּעַזְבֵנִי** אֲדֹנִי כִּי חָלִיתִי הַיּוֹם שְׁלֹשָׁה

My master **left** me behind because I fell sick three days ago (1 Sam 30.13)

c. **וַתֵּלֶד** שָׂרָה אֵשֶׁת אֲדֹנִי בֵן לַאדֹנִי אַחֲרֵי זִקְנָתָהּ

And Sarah my master's wife **bore** a son to my master when she was old. (Gen 24.36)

d. **וַיַּעַשׂ** אֱלֹהִים אֶת־הָרָקִיעַ **וַיַּבְדֵּל** בֵּין הַמַּיִם

So God **made** the dome and **separated** the waters (Gen 1.7)

e. וַיְהִי בִּהְיוֹתָם בַּשָּׂדֶה **וַיָּקָם** קַיִן אֶל־הֶבֶל אָחִיו **וַיַּהַרְגֵהוּ**

… And when they were in the field, Cain **rose up** against his brother Abel, and **killed** him. (Gen 4.8)

Very infrequently, the construction may express future events. In the majority of such cases, it follows a verb in the prophetic *qatal* (8):

(8) a. אָכְלוּ **וַיִּשְׁתַּחֲוּוּ** כָּל־דִּשְׁנֵי־אֶרֶץ

All *they that be* fat upon earth **shall** eat and **worship** (Ps 22.29)

While with dynamic verbs, the *wayyiqtol* provides uses that correspond to various subcategories of perfect or past, when derived from static predicates (adjectival or qualitative roots) the gram shows a different set of values. It may approximate a category of resultative simultaneous. It introduces a present static condition of a thing or person. This condition is simultaneous to the main reference time and has its roots in previously performed activity. When the time frame is that of the present, the gram equals a resultative simultaneous present (in this function also certain dynamic roots may be encountered, see 9.a, 9.b and 9.c). Furthermore, it can be used as stative present with no resultative connotations (9.d, 9.e and 9.f), and finally as an actual (9.g) or persistent present (9.h) (in that function both resultative and stative connotations are irrelevant):

(9) a. **וַתִּמָּלֵא** אַרְצוֹ סוּסִים וְאֵין קֵצֶה לְמַרְכְּבֹתָיו

…their land **is filled** (= has been filled) with horses, and there is no end to their chariots. (Isa 2.7)

b. כִּי־רָאִיתִי אֱלֹהִים פָּנִים אֶל־פָּנִים וַתִּנָּצֵל נַפְשִׁי

For I have seen God face to face, and yet my life **is preserved** (= has been preserved) (Gen 32.31)

c. כִּי־יֶלֶד יֻלַּד־לָנוּ בֵּן נִתַּן־לָנוּ וַתְּהִי הַמִּשְׂרָה עַל־שִׁכְמוֹ וַיִּקְרָא שְׁמוֹ פֶּלֶא יוֹעֵץ

For a child had been for us, a son given to us; authority rests upon his shoulders; he **is named** (= has been named) Wonderful Counselor… (Isa 9.5)

d. כִּי עַתָּה ׀ תָּבוֹא אֵלֶיךָ וַתֵּלֶא

But now it has come to you, and you **are impatient** (Job 4.5)

e. מִי־אַתְּ וַתִּירְאִי

What **do you fear** (= are your afraid) —or who? (Isa 51.12)

f. לָכֵן ׀ שָׂמַח לִבִּי וַיָּגֶל כְּבוֹדִי

Therefore my heart is glad, and my soul **rejoices** (= is glad) (Ps 16.9)

g. וָאֵדַע כִּי־לֹא אֵבוֹשׁ

And I **know** that that I shall not be put to shame (Isa 50.7)

h. אָהַבְתָּ צֶּדֶק וַתִּשְׂנָא רֶשַׁע

…you love righteousness and **hate** wickedness (Ps 45.8)

As a simple present, denoting universal present or gnomic activities, the gram may also be derived from dynamic roots (see 10.a, 10.b and 10.c below):

(10) a. יְהוָה מֵמִית וּמְחַיֶּה מוֹרִיד שְׁאוֹל וַיָּעַל

The Lord kills and brings to life; he brings down to Sheol and **rises up** (1 Sam 2.6)

b. הַנְּמָלִים עַם לֹא־עָז וַיָּכִינוּ בַקַּיִץ לַחְמָם

The ants are a people without strength, yet they **provide** their food in summer (Prov 30.25)

c. בָּא־זָדוֹן וַיָּבֹא קָלוֹן

When pride comes, then **comes** disgrace; (Prov 11.2)

As for the aspect, the formation may indicate past punctual and perfective (unique and bound) events:

(11) a. וַיְהִי כְשָׁמְעוֹ כִּי־הֲרִימֹתִי קוֹלִי וָאֶקְרָא וַיַּעֲזֹב בִּגְדוֹ אֶצְלִי וַיָּנָס וַיֵּצֵא הַחוּצָה

…and when he heard me raise my voice and cry out, he **left** his garment beside me, and **fled** outside. (Gen 39.15)

b. **וַיִּבְרָ֨א** אֱלֹהִ֤ים׀ אֶת־הָֽאָדָם֙

So God **created** humankind (Gen 1.27)

c. **וַיֵּ֣רֶד** יְהֹוָ֔ה לִרְאֹ֥ת אֶת־הָעִ֖יר

The Lord **came down** to see the city (Gen 11.5)

d. **וַיִּקְחוּ֙** אֶת־כְּתֹ֣נֶת יוֹסֵ֔ף **וַיִּשְׁחֲטוּ֙** שְׂעִ֣יר עִזִּ֔ים **וַיִּטְבְּל֥וּ** אֶת־הַכֻּתֹּ֖נֶת בַּדָּֽם׃

They **took** Joseph's robe, **slaughtered** a goat and **dipped** the robe in the blood (Gen 37.31)

However, in some instances, the *wayyiqtol* in the past time frame, seems to be aspectually neutral, describing events which even allow durative readings (12):

(12) a. וַיֵּרְד֤וּ אֲבֹתֵ֙ינוּ֙ מִצְרַ֔יְמָה **וַנֵּ֥שֶׁב** בְּמִצְרַ֖יִם יָמִ֣ים רַבִּ֑ים וַיָּרֵ֧עוּ לָ֛נוּ מִצְרַ֖יִם וְלַאֲבֹתֵֽינוּ

…how our ancestors went down to Egypt, and we **lived** in Egypt a long time; and the Egyptians oppressed us and our ancestors; (Num 20.15)

b. **וַיְהִ֧י** אֲרֽוֹן־יְהֹוָ֛ה בִּשְׂדֵ֥ה פְלִשְׁתִּ֖ים שִׁבְעָ֥ה חֳדָשִֽׁים

The ark of the LORD **was** in the country of the Philistines seven months. (1 Sam 6.1)

Furthermore, in certain anterior functions (inclusive-universal) as well as with the force of a simultaneous resultative, stative and (actual, persistent and simple) present, the gram clearly denotes activities whose aspectual nature is not perfective (cf. for instance examples 5.c, 5.d and 5.e as well as from 9.a to 9.h introduced above).

It should be observed that the *wayyiqtol* does not provide inherent modal meanings. Nevertheless, it can appear in conditional protases with an evident hypothetical force (13.a). It may also be found in apodoses (conditional relative and participial phrases); in these cases, the temporal-aspectual-taxis value of the gram does not differ from its indicative homologue—it mainly connotes the idea of anteriority and past (13.b).

(13) a. אִם־קָרָ֥אתִי **וַֽיַּעֲנֵ֑נִי** לֹֽא־אַ֝אֲמִ֗ין כִּֽי־יַאֲזִ֥ין קוֹלִֽי׃

If I summoned him and he **answered** me, I do not believe that he would listen to my voice. (Job 9.16)

b. (20) הַיָּרֵא֙ אֶת־דְּבַ֣ר יְהֹוָ֔ה מֵעַבְדֵ֖י פַּרְעֹ֑ה הֵנִ֛יס אֶת־עֲבָדָ֥יו וְאֶת־מִקְנֵ֖הוּ אֶל־הַבָּתִּֽים

(21) וַאֲשֶׁ֥ר לֹא־שָׂ֛ם לִבּ֖וֹ אֶל־דְּבַ֣ר יְהֹוָ֑ה **וַֽיַּעֲזֹ֛ב** אֶת־עֲבָדָ֥יו וְאֶת־מִקְנֵ֖הוּ בַּשָּׂדֶֽה

²⁰Those officials of Pharaoh who feared the word of the LORD hurried their slaves and livestock off to a secure place. ²¹Those who did not regard the word of the LORD **left** their slaves and livestock in the open field. (Exod 9.20–21)

Taking into consideration discourse-pragmatic properties, the gram predominantly appears in the narration where it introduces principal events of the narrative story, that is, the backbone of the narration (14):

(14)   ⁽¹⁾ **וַיֵּ֥לֶךְ** אִ֖ישׁ מִבֵּ֣ית לֵוִ֑י **וַיִּקַּ֖ח** אֶת־בַּת־לֵוִֽי

⁽²⁾ **וַתַּ֥הַר** הָאִשָּׁ֖ה **וַתֵּ֣לֶד** בֵּ֑ן **וַתֵּ֤רֶא** אֹתוֹ֙ כִּי־ט֣וֹב ה֔וּא **וַֽתִּצְפְּנֵ֖הוּ** שְׁלֹשָׁ֥ה יְרָחִֽים

⁽³⁾ וְלֹא־יָכְלָ֣ה עוֹד֮ הַצְּפִינוֹ֒ **וַתִּֽקַּֽח־לוֹ֙** תֵּ֣בַת גֹּ֔מֶא **וַתַּחְמְרָ֥ה** בַחֵמָ֖ר וּבַזָּ֑פֶת **וַתָּ֤שֶׂם** בָּהּ֙ אֶת־הַיֶּ֔לֶד **וַתָּ֥שֶׂם** בַּסּ֖וּף עַל־שְׂפַ֥ת הַיְאֹֽר

¹Now a man from the house of Levi **went** and **married** a Levite woman. ²The woman **conceived** and **bore** a son; and when she **saw** that he was a fine baby, she hid him three months. ³When she could hide him no longer she **got** a papyrus basket for him, and **plastered** it with bitumen and pitch; she **put** the child in it and **placed** it among the reeds on the bank of the river. (Exod 2.1–3)

Furthermore, it may frequently be found in the personal narration (narrative discourse) with the same function:

(15)   ⁽³⁴⁾ [...]אָנֹֽכִי **וַיֹּאמַ֑ר** עֶ֥בֶד אַבְרָהָ֖ם

⁽⁴²⁾ [...]**וָאֹמַ֑ר** **וָאָבֹ֥א** הַיּ֖וֹם אֶל־הָעָ֑יִן

⁽⁴⁵⁾ [...]**וַתִּשְׁאָֽב** **וַתֵּ֣רֶד** הָעַ֔יְנָה

⁽⁴⁶⁾ [...]**וַתֹּ֣אמֶר** **וַתְּמַהֵ֗ר** **וַתּ֤וֹרֶד** כַּדָּהּ֙ מֵֽעָלֶ֔יהָ

⁽⁴⁷⁾ [...]**וָאֶשְׁאַ֣ל** אֹתָ֗הּ

³⁴(*narrative*) So he said, (*the discourse begins*) "I am Abraham's servant. [...] ⁴²(*in the discourse, there is a narrative fragment—personal narration*) "I **came** today to the spring, and … ⁴⁵and she [Rebekah] **went** down to the spring, and **drew**… ⁴⁶She quickly **let down** her jar from her shoulder, and **said**,… ⁴⁷Then I **asked** her,…(Gen 24.34–47)

Still in narrative fragments, in some instances, the *wayyiqtol* can introduce explicative commentaries.

(16)   וְאֵ֗לֶּה הָי֤וּ בְּנֵ֣י אָהֳלִיבָמָ֔ה בַת־עֲנָ֖ה בַּת־צִבְע֑וֹן אֵ֣שֶׁת עֵשָׂ֔ו **וַתֵּ֤לֶד** לְעֵשָׂו֙ אֶת־יְע֔וּשׁ וְאֶת־יַעְלָ֖ם וְאֶת־קֹֽרַח

These were the sons of Esau's wife Oholibamah, daughter of Anah son of Zibeon: she (**had**) **bore** to Esau Jeush, Jalam, and Korah. (Gen 36.14)

Finally, it infrequently appears in the discourse with an explanatory force:

(17)   וַיֹּאמֶר־לָהּ הַמֶּלֶךְ מַה־לָּךְ וַתֹּאמֶר אֲבָל
אִשָּׁה־אַלְמָנָה אֲנִי **וַיָּמָת** אִישִׁי

The king asked her, "What is your trouble?" She answered, "Alas, I am a widow; my husband **is dead**. (2 Sam 14.5)

4.1.2. ORDERLINESS PRINCIPLE—PROPOSING A DEFINITION

The inventory of synchronic uses of the *wayyiqtol* suggests that one is dealing with a highly heterogeneous phenomenon. It almost appears as a random category that may be employed to express unrelated and, in some cases, contradictory meanings (cf. definite past and future).

The gram provides various prototypical present anterior (perfect) values such as resultative, inclusive, frequentative and experiential. It is also employed as an indefinite and definite (recent, general and remote) past. In the past time frame, it may denote both perfective and aspectually neutral (simple) events (additionally, in several perfect uses, the aspectual load of the gram is not perfective, cf. inclusive perfect). Furthermore, it can approximate a past perfect (pluperfect). On the other hand, when derived from static (qualitative and adjectival) roots, the *wayyiqtol* functions as a resultative simultaneous present, a stative present and a simple present (in these cases, the aspectual connotation fails yet again to be perfective). Infrequently, the construction appears with the force of a future tense. Finally, as for the discourse pragmatic function, the gram predominantly introduces main events of the backbone in the narration and narrative discourse (personal narration). Nevertheless, in some occasions, it is employed in commentaries both in the narrative and in the discourse.

As required by the orderliness principle of the panchronic methodology, it should be possible to embrace all synchronically incompatible or heterogeneous values of a construction and explain them as manifestations of a homogenous evolutionary trajectory. Put differently, the gram—which from the synchronic perspective is an amalgam of accidental functions that cannot be reduced to one clear and unique aspectual, temporal, taxis, modal and text value—may be understood as a single phenomenon, a prototypical homogeneous diachrony (i.e. path), a realization of one linguistic input. Consequently, we should be able to order the detected values $m_a \ldots m_n$ into a sequence that mirrors a universal path-law as posited by path and/or grammaticalization theories.

First, various values of the *wayyiqtol*—those related to perfect and past functions—may be arranged into a series which corresponds to the development codified in the anterior path (Figure 4):
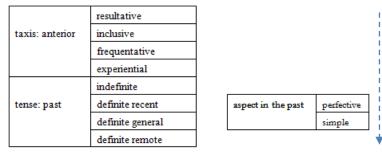
taxis: anterior	resultative	
	inclusive	
	frequentative	
	experiential	
tense: past	indefinite	
	definite recent	
	definite general	
	definite remote	

aspect in the past	perfective
	simple

Figure 4: Values of the wayyiqtol arranged into the anterior path in the present time frame[35]

Since the gram can be categorized in terms of an anterior trajectory—a sub-development within the resultative path—it is to be expected that it shows traces of other evolutionary scenarios, prototypical for resultative constructions. In accordance with this assumption, in the case of static roots, the meanings of the *wayyiqtol* can be tidied up and represented as a simultaneous track:

taxis	simultaneous present
aspect	stative present
tense	simple present

Figure 5: Values of the wayyiqtol arranged into the simultaneous path in the present time frame[36]

The values of the future tense and past perfect (pluperfect) can be harmonized with the previously ordered meanings and explained as stages of the anterior trajectory within, respectively, the future and past temporal frame (cf. the development in Polish where the future perfect became a future tense with no taxis connotations available anymore).

If the *wayyiqtol* is a prototypical resultative, and especially anterior, diachrony, it must have advanced on the evolutionary cline since the gram is not employed with the force of a resultative proper (in case of dynamic roots) and a performative expression. The last value can, on the other hand, be conveyed by another resultative diachrony, i.e. the *qatal.*

(18)   הִגַּ֤דְתִּי הַיּוֹם֙ לַיהוָ֣ה אֱלֹהֶ֔יךָ כִּי־בָ֖אתִי אֶל־הָאָ֑רֶץ

Today I **declare** to the LORD your God that I have come into the land (Deut 26:3)

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[35] The vertical arrow symbolizes a hypothesized diachronic progression.

[36] The vertical arrow stands for a hypothesized historical development.

Moreover, it should be noted that the formation consistently fails to indicate broadly understood evidential nuances. Thus, the gram does not provide uses which could be arranged in terms of the third formative development characteristic for resultative constructions. Yet again, it is the *qatal* which approximates an evidential gram, being not infrequently employed with a guessing perfect force. [37] In the following examples the distinction between the *qatal* (evidential implications) and the *wayyiqtol* (free of evidential connotations) is clear:

(19) וַתַּ֣הַר ע֗וֹד וַתֵּ֣לֶד בֵּן֮ וַתֹּאמֶר֒ כִּֽי־**שָׁמַ֣ע** יְהוָה֒

כִּֽי־שְׂנוּאָ֣ה אָנֹ֔כִי **וַיִּתֶּן**־לִ֖י גַּם־אֶת־זֶ֑ה וַתִּקְרָ֥א שְׁמ֖וֹ שִׁמְעֽוֹן׃

> She became pregnant again and gave birth to another son. She said, "The Lord **must have heard** that I'm unloved, and so (i.e. due to this fact) he **gave** me this son." So she named him Simeon. (Gen 29:33)

Since the modal *wayyiqtol* appears only in explicitly modal contexts (especially in conditional protases and apodoses) and, furthermore, does not differ—as the TATM values are involved—from its purely indicative counterpart, it may be rationalized as a modal contamination of the non-modal gram. [38]

Finally, as for the discourse pragmatic uses, the gram infrequently appears in the discourse with a commenting force. In personal narratives, it is employed both to introduce commentaries and events that belong to the backbone of the story. Finally, it is extensively and primarily used in the narration proper to relate main events of the tale. In sum, the function of a commentary is

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[37] For an exhaustive analysis of evidential functions of the *qatal* see Andrason (2010b).

[38] During this process, initially indicative formations due to their consistent use in clearly modal contexts are gradually contaminated by the environment in which they appear, assuming its meaning as their own (these modal contexts may arise because of the use of some lexical elements or they can be syntactically motivated). At the end of the evolution, the originally indicative gram is entirely identified with the modal value of its own milieu. Its use as a non-modal becomes impossible and the formation is reanalyzed as a mood (see Figure 1) (Dahl 1985:11, Hopper & Traugott 2003:82 and Bybee, Perkins & Pagliuca 1994:25-26). Among environments which frequently impose a modal reading as an integral part of a category Bybee, Perkins & Pagliuca (1994:235) quote hypothetical periods. The phenomenon, to an extent, corresponds to 'conventionalization of implicature' in Dahl (1985:11) and Bybee, Perkins & Pagliuca (1994:25-26 and 296) as well as to 'context-induced reinterpretation' as proposed by Heine, Claudi & Hünnemeyer (1991b:71-72) and to semantization in Hopper & Traugott (2003:82). However, in comparison to the above mentioned processes, the modal contamination is narrower codifying the emergence of modal formations. It is thus understood as one of the possible modal trajectories.

significantly less common and the introduction of principal actions of the story backbone is restricted to narrative discourse (personal narrative) and narration proper. These facts may be rationalized and related to the semantic load of the *wayyiqtol* in the following manner.

The discourse pragmatic force reflects a regular grammaticalization spread of resultative grams within different types of text: from discourse to narration, through narrative discourse, and its progressive generalization as a form employed to introduce main events of the corresponding text, not limited—as it was originally—to commentaries (cf. Harris 1982 and Squartini & Bertinetto 2000:406; see also section 2.1 above). Resultatives start their grammatical life as commenting formations—they denote static-resulting conditions acquired by objects or persons. Conversely, they do not introduce main events of the text. The conversion into grams which convey principal activities (i.e. components of the story line) is a later phenomenon and parallels the semantic progress on the anterior and/or simultaneous trajectories.

We have already mentioned that resultative formations first evolve into past tenses (being able to introduce main events of the tale) in the discourse, subsequently in personal narratives (narrative discourse), and only at the end in the narration proper (Squartini & Bertinetto 2000:422). This means that the narrative past is the last in the sequence of stages a resultative gram can acquire within the anterior path. On the other hand, the function of commenting and introducing main events in the discourse (e.g. dialogue) is the first to be abandoned. In light of all these facts—and in accordance with previously noted properties of the gram—the *wayyiqtol* corresponds to a resultative diachrony, yet again, at an advanced moment of its development. Put differently, its discourse pragmatic baggage may be related to the TATM character of the construction and defined as corresponding to an advanced portion of the grammatical evolution, typical for resultative formations.

In contrast to various meanings which have been accommodated on the anterior and simultaneous trajectories, the consecutive value (and its subclasses) does not correspond to any particular stage on the two paths. It does not match any phase of evolutionary scenarios posited for resultative constructions. It is thus probable that it stems from some external factors such as, for instance, contextual (semantic or syntactic) contamination (cf. above) or an incorporation of originally independent lexemes which, having become a part of the periphrasis, introduced a consecutive tone to the formation.

Since the deduction of diachrony from synchrony may be misleading, the synchronic panchrony does not, by itself and in isolation from other facts, constitute a valid explanation. Consequently, the identification of particular meanings of a formation as subsequent stages of a given universal trajectory is, without diachronic and comparative data, a matter of guessing. Therefore, our pan-

chronic proposal—based on the synchronic evidence—must be confronted with two other types of the panchronic method. This means that, if our hypothesis is correct, the above hypothesized definition of the *wayyiqtol* (i.e., as an advanced portion of the resultative path) should be consistent with the diachronic and comparative analysis.

4.2. *DIACHRONIC PANCHRONY*

In accordance with the most common opinion, the BH *wayyiqtol* reflects an old periphrasis compounded by the verbal element -*yiqtol*—a successor of the Proto-Semetic (PS) conjugation **yaqtul*—and a non-verbal entity surfacing in Biblical Hebrew as *wa-* which, furthermore, triggered a reduplication of the initial (non-radical) consonant of the *yiqtol*. As will be demonstrated, the precise origin of this morpheme (referred to in the following parts of the paper as *wa-*R) remains uncertain (Waltke & O'Connor 1990, Smith 1991 and Rainey 1996).

4.2.1. *RESULTATIVE-YIQTOL*

As defended by various scholars (Waltke & O'Connor 1990, Smith 1991:12–13, Seow 1995:225–226, Rainey 1996, Lipinski 2001:350, Kienast 2001:318, Cook 2004 and 2006, and Kouwenberg 2010:129), the portion -*yiqtol* of the *wayyiqtol* is related to the Akkadian *iprus* and to the Arabic *lam(ma)-yaqtul*. From the genetic perspective, one is dealing with a shared morphology that reflects the PS **yaqtul* (or **yiqVl*, Kouwenberg 2010:129) (Smith 2009:12–13, Seow 1995:225–226, Kienast 2001:318–319, Lipiński 2001:365, Cook 2006:34 and 2008:6–7 and Andrason 2010d:341–343). According to Kienast (2001:294 and 334), the PS **yaqtul*, itself, derived from a nominal basis, a verbal resultative adjective (called also 'perfective participle') **q(a)tal* (cf. also a similar opinion on the resultative origin of the **yaqtul* in Kouwenberg 2010:130). This participial form was verbalized by employing personal pronouns which already in the oldest texts were incorporated to the verb appearing as indissoluble prefixes *y-*, *t-*, and *n-* (cf. Kienast 2001:376). Such a reconstruction of the origin of the **yaqtul*—the source of the *yiqtol* in the *wayyiqtol*—is consistent with our hypothesized definition of the gram as a resultative diachrony. A periphrastic participial (verbal adjectival) origin of the gram and its verbalization by means of personal pronouns is a highly plausible and typologically frequent starting point of resultative constructions (cf. the same typologically origin of the Akkadian *parsaku* or BH *qatal*, Kienast 202–204, or the Polish past in -*no* / -*to*, Migdalski 2006:142). It constitutes a semantically transparent and cognitively plausible source of the gram defined as a resultative path. In that manner, the reconstructed foundation of the gram agrees with our panchronic hypothesis and satisfies the requirement of cognitive motivation of meaning displayed by the formation during its grammati-

cal life: the expression from which a grammatical category emerged (a periphrasis built on resultative de-verbal adjective) motivates all the meanings displayed by the formation at the BH period.

Unfortunately, there are no direct sources available which could reveal the semantic potential of the *wayyiqtol* in earlier phases of its development, i.e. in the pre-Hebrew period, in at the Common West-Semitic or Proto-Semitic stage. We cannot trace the evolution of the construction from pre-Biblical Hebrew to the classical language. However, we can employ comparative data and our knowledge of genetic relations of the construction with other forms in order to extrapolate some diachronically valid information. In accordance with requirements of the panchronic method, and given the unavailability of physical evidence, i.e. texts, this technique—a mixture of diachronic and comparative panchrony—is expected to demonstrate two facts. First, if the BH *wayyiqtol* is an advanced resultative gram, its genetic homologue in another language, belonging to the Semitic family, should display uses which also match the resultative path. This claim (all successors of a given linguistic input should correspond to the same path-law) derives from the basis of the comparative panchrony (see section 4.2.2 below). Second, a successor of the PS **yaqtul* employed at significantly earlier époques than the BH gram should cover segments corresponding to less developed portions of the resultative trajectory. The difference between the two grams is required to consist in the advancement on the trajectory: the younger formation is less developed while the older one is expected to provide uses which match more advanced stages. This assumption harmonizes with principles of the diachronic panchrony. Let us study the properties of the Akkadian *iprus*, the oldest available gram equivalent to the -*yiqtol* of the *wayyiqtol* and descendant of the PS **yaqtul*.

In conformity with our thesis, the Akkadian *iprus*—a reflex of the PS **yaqtul*—has been defined as a prototypical resultative diachrony (Kouwenberg 2010:129–132 and Andrason 2010d:338–344). Andrason rationalizes the synchronic set of chaotic and unrelated values displayed by the *iprus* and defines the gram as a manifestation of the resultative path.

The *iprus* displays functions that correspond to stages on the anterior path: it is used as a perfect (especially in negative and subordinated environments where the new perfect *iptaras* appears rather infrequently) or as a past, both perfective and simple (i.e. with no evident perfective or punctual marking). It is furthermore commonly employed as a principal past tense of narration. In subordinated temporal, and sometimes in principal clauses when the main time reference is the past, the formation equals the past anterior (pluperfect). Other uses of the gram reflect phases of the simultaneous track: the *iprus* form of two static verbs *edûm* 'know' and *isûm* 'have' has stative meaning with no explicit temporal information. In the present or general time context, it approximates a present tense (cf. Kouwenberg 2010:127–129 and 132, Huehner-

gard 2005:144–7, Malbran-Labat and Vita 2005:102). The so-far mentioned values parallel those recorded in Biblical Hebrew.

However, the Akkadian formation offers uses which slightly diverge from the semantic potential of BH gram. Namely, not infrequently, it can express future activities and situations. In clauses with *adi…la* and *lama*, it appears with the present-future time reference, and indicates respectively anterior future (20.a) and immediate future events 20.b, cf. Huehnergard 2005:285–286). Furthermore, as observed by Loesov (2005:115, 117–118), the *iprus* is used as the best available exponent and the principal vehicle (thus still productive) of the performative force in Akkadian (both in Old Babylonian and Old Akkadian, cf. *Koinzidenzfall* in Kienast 2001:297) (see examples 20.c, 20.d. and 20.e below).

> (20) a. adi abī lā **illik**am ul târ
>
> I will not return before my father has come (Huehnergard 2005:285)
>
> b. lāma **ipšurū**šu alkīm
>
> Come before they sell / have sold it (Huehnergard 2005:286)
>
> c. **atma**
>
> I swear! (Loesov 2005:117)
>
> d. ú-na-ḫi-i-id-ka
>
> I call your attention (= I order you) (Loesov 2005:117)
>
> e. ana šulmika **ašpur**-am
>
> I wish you well-being (Sallaberger 1999:87–92)

Consequently, as expected, the *iprus*—a historically older gram—provides values which match less advanced stages of the resultative path, concretely its anterior sub-track. First, it is more commonly employed as a future perfect (or a future) than in Biblical Hebrew. Second, its perfect (anterior) proper force is significantly more expanded. In fact, the gram is the principal vehicle of present perfect values in negative contexts and in subordinated phrases. And third, the formation regularly conveys performative nuances—this ability was lost in the biblical language.

4.2.2. *CONSECUTIVE WA-R*

While the entity *-yiqtol* of the *wayyiqtol* is clearly responsible of the meanings-stages belonging to the resultative path, the element *wa-R* is thought to have introduced consecutive connotations. There are several theories which reconstruct the origin of the BH *wa-R* (for a detailed review see Smith 1991). For instance, G. R. Driver (1936) suggested that there was a diachronic connection between the BH *wa-R* and the connector *ma* in Akkadian and *uma* in Assyrian. Maag (1953:86–88) claimed that the *wa-R* is an amalgam of the copulative

ו and the demonstrative particle הַן, and proposed the following evolution: *wəhanyiqtul > *wanyiqtul > wayyiqtol. Other theories are more speculative, linking the BH morpheme with the Egyptian language. Young (1953) argued that the *wa*-R reflects two Egyptian particles: the connective *iw* and the morpheme *n* of the past. In his view, the *wayyiqtol* originated in a periphrastic sequence **wan + yiqtol* (on the Egyptian connection see also Rendsburg 1981:668–669, Fulco 1982:662 and Sheehan 1970). More recently, Brenner (1986:14, 21, 24 and 34) defended the Egyptian source of the BH form suggesting, however, that one is dealing with a borrowed construction (for criticism of the Egyptian connection see Smith 1991:3–5).

Whatever the exact source of the *wa*-R is, most scholars seem to agree that this unit is somehow related to the BH copulative particle ו *wa* which derives from the PS **wa* (Kustár 1972, Revell 1984:443, Smith 1991:12–15, Waltke & O'Connor 1990:545 and Cook 2002; see also already König 1897, S. R. Driver 1881 and Bauer & Leander [1918–22] 1962). Thus, the *wayyiqtol* would have a similar (but not identical) origin as the BH *weqatal* deriving from the PS **wa* and an independent verbal conjugation (the change of the **wa* into *we-* in the *weqatal* is assumed to have occurred in the post-exilic time, cf. Revell 1984:443–444 and Smith 1991:4–8). Accordingly, this non-verbal element (descendent of PS **wa*) seems to connect one event or situation with another, introducing consecutive nuances (Waltke & O'Connor 1990:545 and Smith 1991:12–14). Let us study the consecutive force of the successor of the PS **wa* in a more detailed manner.

It is accepted that the Central Semitic branch originally distinguished between (at least) two different connectors: one consecutive (**pa* 'then, and thus') and another neutral (**wa* 'and', see Waltke & O'Connor 1990:522 and 655, and Garr 2004:114–115). This situation may still be found in Arabic, a language which possesses a consecutive particle ف (from the original **pa*) and a neutral conjunction و (from the **wa*, cf. Wright [1896–1898] 2005:I.290–291 and II. 345 and Danecki 1994:364). On the contrary, Biblical Hebrew does not make any distinction between the two meanings, and employs the particle *waw* ו both with coordinative and consecutive force (certainly, in distinct syntactic environments, cf. Waltke & O'Connor 1990:522–523). In fact, in the entire Northwest Semitic group, the successor of the original consecutive particle **pa*—genetically related with the Arabic ف (Aartun 1978:1–14 and Watson 1990:83–84)—is rather infrequent (Garr 2004:115). It is only attested in Ugaritic (Watson 1990:84–85 and Sivan 2001:188), in certain Aramaic dialects (Jean & Hoftijzer 1965), in Samalian (Garr 2004:115), and—in rare and disputed instances—in Biblical Hebrew (Waltke & O'Connor 1994:655, Aartun 1978 and Dahood 1966:307–308). This means that Northwest Semitic idioms—Biblical Hebrew included—suffered a gradual decay of the lexeme **pa* (Waltke & O'Connor 1990:522 and 655, cf. also Garr

2004:114–115). In some cases, this led to a loss of the ability to explicitly distinguish coordination from consecution and to a semantic merger of the two values within a single form. As a result, once the **pa* started to disappear, the originally coordinative particle **wa* seems to have incorporated consecutive nuances, previously provided by the **pa*.

It is highly important to note that in Ugaritic, in some cases, the consecutive particle *p* and the coordinative *w* functioned as equivalents and the former could be replaced by the latter (Parker 1967:78 and Watson 1990:78). In fact, the Ugaritic *p*, besides providing its original consecutive meaning of immediate succession and result (Pardee 1977:5), temporal and/or logical consequence (Tropper 2002:82) or of continuation and resumption (Aartun 1978:1–5), it could also be employed as a "simple coordinating conjunction" (Watson 1990:85). Panchronically, this corresponds to an intermediate stage between the initial Proto-Northwest Semitic (or Proto-Central Semitic) situation (the two particles are clearly distinct) and the state of affairs in Biblical Hebrew (only the PNS **wa* survived having incorporated the values of the **pa*; thus, no distinction is made between the coordinative and consecutive variants).

The above sketched origin of the *wa*-R justifies the consecutive force showed by the formation in Biblical Hebrew, a value which does not correspond to any particular stage on the resultative path, and which, consequently, cannot be explained as a manifestation of that evolutionary law. Linking, however, the *wa*-R with the coordinative and (once the particle **pa* has been marginalized) consecutive sense of the lexeme **wa* from which the BH morpheme (at least partially) derives, one finds explicit and transparent sources of consecutiveness provided by the gram. In sum, we are dealing with a resultative diachrony **yaqtul* contextualized by the incorporation of a coordinative-consecutive lexeme. As mentioned, this entity surfaces in Biblical Hebrew as *wa*-R and is related to the particle ו (from an earlier coordinative **wa*), having furthermore incorporated the consecutive potential of the particle **pa*).

4.2.3. *POSTERIOR EVOLUTION*

The posterior evolution of the BH *wayyiqtol* does not offer any direct evidence. The form simply disappeared in Rabbinic Hebrew (Pérez 1992:182). However, the loss of the construction is panchronically consistent with, and in fact expected, given our definition. As proposed, the *wayyiqtol* is to be classified as a highly advanced portion of the resultative, and in particular anterior, path. Diachronic laws teach us that profoundly developed old resultatives tend to vanish at subsequent historical periods. This happens especially if the language possesses another younger resultative formation.

Such a phenomenon has partially occurred in Modern French where the old resultative diachrony, the simple past *j' écrivis* 'I

wrote' (*Passé Simple* a successor of the Latin *perfectum*) has been lost in the spoken language and even in non-literary narrative genres (Mauger 1968:241). In those situations, it was substituted by a younger diachrony, the *Passé Composé*: *j'ai écrit* 'I have written / I wrote'. Nowadays, the *Passé Simple* is employed exclusively in the literary narration as a narrative past tense (Mauger 1968:238–239, 241–242). However, the current tendency is that younger authors use the *Passé Composé* also in the narration proper. A typologically similar evolution took place in some Slavic (Polish) and Germanic languages (Yiddish or Afrikaans) where the old perfects-pasts have been substituted by younger formations.

This situation approximates the state of affairs recorded in Biblical and Rabbinic Hebrew. In the BH period, the *wayyiqtol* was already extensively employed as a narrative past tense—this usage corresponds to the final stage of the development along the anterior and grammaticalization clines. Furthermore, the language included in its verbal system a younger resultative diachrony, the *qatal*, employed, among others, in various perfect and past functions. It is thus not surprising that, in the posterior époque, the profoundly developed resultative *wayyiqtol* was lost, being substituted by the younger gram *qatal*, which furthermore took over uses previously conveyed by the older construction (note that in the Rabbinic period, the *qatal* was used with a narrative force). The loss of the *wayyiqtol* and its substitution by a younger resultative formation *qatal* support our definition of the former as an advanced resultative diachrony. We are dealing with a common phenomenon labeled 'doughnut gram': original domains of a highly advanced formation are progressively invaded by a novel construction which evolves along typologically the same trajectory (Dahl 2000:15–17). Consequently, if the *qatal*—itself, a resultative diachrony—replaced the *wayyiqtol*, the latter must also be viewed as a resultative trajectory.

On the other hand, the typological comparison with the *Passé Simple* enables us to observe that the BH gram—even though profoundly developed along its path—is less advanced than the French formation. It is not restricted to narrative uses, but, quite the reverse, may still be found in personal narration and even—although scarcely—in discourse.

To conclude, the diachronic analysis is consistent with our definition of the *wayyiqtol*. The proper verbal segment of the construction -*yiqtol* reflects a PS resultative diachrony **yaqtul* which originated in a semantically transparent and cognitively plausible input, verbal adjective or resultative participle: a typologically frequent device in deriving resultative grams. The consecutive value of the formation derives from the incorporation of an external element (surfacing as *wa*-R built, at least partially, on the PS **wa*) with an explicit coordinative-consecutive meaning (incorporated due to the functional corrosion and ultimate loss of the particle **pa*). Finally, the posterior development of the *wayyiqtol* confirms the identifica-

tion of the gram with highly advanced stages of the resultative path. In Rabbinic Hebrew, the formation was lost, being substituted by a younger resultative gram *qatal.*

4.3. COMPARATIVE PANCHRONY

Once our synchronically derived hypothesis has been confirmed by diachronic data, the only remaining step in validating the proposed definition corresponds to the comparative analysis. As explained in section 3.2, comparative panchrony requires that values provided by genetically related grams in cognate languages—constructions originated in a shared input form—be reducible to the same path.

An entirely grammaticalized successor of the original periphrasis **wa-* (+?) + **yaqtul* may, without doubt, be found only in Biblical Hebrew, where it constitutes an independent conjugation, *wayyiqtol.* However, descendants of the **yaqtul* accompanied by a reflex of the **wa* appear—even though in more sporadic instances—in several Semitic languages, acting invariably as a narrative past tense (Lipiński 2001:350). For example, such locutions exist in Aramaic (Emerton 1994:255–258), Ugaritic (Smith 1991:12), Moabite, Phoenician and South Arabian (Lipiński 2001:350). This fact confirms the classification of the *wayyiqtol* as a resultative diachrony: in all Semitic idioms, homologues of the BH formation convey meaning that matches the final stage of the trajectory.

Even stronger evidence is provided by the comparative analysis of the verbal element **yaqtul* itself which, as observed above, is responsible for the values inherent to the resultative track. We have already noted that in Akkadian (Old Babylonian), the *iprus* (< PS **yaqtul*) functions as a perfect (present, past, and future), a past (perfective and neutral), and a present (stative). It was also frequently employed with the performative force. As for the discourse pragmatic value, it was used both as a narrative and discursive category. Thus, the formation matches all the stages of the resultative path (both the anterior and simultaneous sub-paths). It was emphasized that although extensively employed as a narrative past, the gram clearly preserves meanings that reflect initial phases of the development—it is a principal vehicle of the perfect sense in negative contexts (cf. also the above-mentioned performative and future meanings).

Besides Akkadian, the PS **yaqtul* of the resultative path, survives in various Semitic languages, being, however, commonly restricted to syntactically marked contexts (such as, for instance, the prefixed *wa*-R in Hebrew, Hertzon 1969:18–20). The successors of the **yaqtul* are extensively attested in Amarna (21.a) and in Ugaritic texts (Smith 1991:12). According to Rainey (1996.II:223), in the dialect of Amarna, the *yaqtul* was a living spoken tense employed both in the discourse and narration with a perfect (21.a, cf. Moran 2003:49 and Rainey 1996:II.222–227) and past meaning (21.b). On the other hand, it should be noted that another resulta-

tive diachrony, the *qatala* is a more frequent means of conveying resultative, perfect and past meanings (Rainey 1996:II.222 and 227). Ugaritic employs the construction as a past, typically in poetic narrative (21.c), and with a significantly minor frequency, in prose where it is replaced by the *qatal* (Sivan 2001:99 and Kienast 2001:311–312). The form also appears in Sabean, especially following the particle *lm*, yet again with a past narrative value (21.d, see Beeston 1984:47, Smith 1991:12 and Kienast 2001:300 and 309). In this idiom, perfect (present and past) functions are regularly expressed by the new resultative, the suffix conjugation (Kienast 2001:300). It similarly persists in some particular environments in Ge'ez (Lambdin 1978:151 and Hertzon 1969:6–8). Finally, it is a common form in Classical Arabic appearing in two expressions: in *lam yaqtul* with the value of a negative past (21.e) and negative (experiential) perfect (21.f, anti-perfect) ('I have not done / I did not do"); and in *lammā yaqtul* approximating a resultative negative perfect ('I have not done yet') (21.g and 21.h). Consequently, the Arabic successor of the PS **yaqtul* is commonly employed as a present perfect or past tense being nevertheless limited to negative contexts, i.e. لم *lam* and لما *lammā*. In remaining environments it has been substituted by the younger *qatala*. On the other hand, the formation, although predominant in the narration proper, may be found in discourse and, even, in dialogues.

(21) a.   ù **aš-pu-ur** …

…so I wrote [and a regular army force came forth and it seized their father] (Rainey 1996:II.227)

b. iš-te-mé a-wa-te^MEŠ ša **iš-pu-ur** LUGAL EN-ia ana ÌR-šu

I have heard the words which the king, my lord, [had] sent to his servant (Rainey 1996:II.224)

c. **tǵly** 'ilm r'išthm

The gods lowered their heads (Sivan 2001:99)

d. w-bn-hw f-**jt'wlw** b-'lj hgr-n ON

und von dort wandten sie sich gegen die Stadt ON (Kienast 2001:300)

e. **لم يكن** ذاهبا

He was not going

f. **لم العب** ابدا كرة القدم

I have never played football

g. امرته **ولما يذهب**

I ordered him, and he has not yet gone (Haywood & Nahmad 1965:129)

h. لما يذوقوا عذاب

> They have not yet tasted my punishment (Wright [1896–1898] 2005:II.41)

The comparative study of reflexes of the PS **yaqtul* reveals that values provided by homologues of the *-yiqtol* in the *wayyiqtol* correspond to stages on the resultative path. In all languages, the "post-*yaqtul* grams" match highly advanced portions of the trajectory (in Akkadian, and partially in Arabic it also reflects more initial phases of the cline). Moreover, it has been noted that in various tongues the successors of the **yaqtul* have survived in strictly determined contexts or in particular expressions. This means that the construction not only has significantly advanced on its evolutionary path, but has also undergone a process of a semantic and functional corrosion. This occurred due to the previously mentioned advancement as well as because of the emergence and spread of a new resultative form, the prefix conjugation **qatal(a)*. As already explained, such a conflict between old and young grams is a frequent phenomenon and leads to the formation of so-called doughnut grams (Dahl 2000:15–17). Both pieces of information—i.e. the semantic advancement of the grams (frequent use as a narrative past) and their functional corrosion (substitution by a novel resultative and restriction to marked environments)—suggest that we are dealing with a resultative formation at a highly evolved stage. Such a conclusion is consistent with our definition of the *wayyiqtol*.

As for the consecutive connotation of the *wayyiqtol*, in the preceding section it has been demonstrated that this value stemmed from the incorporation of a coordinative-consecutive lexeme built on the PS lexeme **wa*. In the same part of the paper, we have provided some comparative evidence proving a consecutive force of successors of the **wa* given its functional confusion and merger with the explicitly consecutive conjunction **pa*. Furthermore, it should be noted that the use of coordinative-consecutive particles with successors of the PS **yaqtul* and/or with other resultative type grams is highly frequent in all Semitic languages, and in particular in the Western branch (Lipiński 2001:528). It may be found in Arabic (both with particles *wa* and *fa*, Danecki 1994:364, see also Lipiński 2001:350), in Amarna (with the particle *u*, cf. Rainey 1996:III.100), in Ugaritic (with *u* and *f* Parker 1967:78, Watson 1990:78 and Smith 1991:12) and in Sabean (Kienast 2001:300). Hence, one may assume that the BH *wayyiqtol* reflects a profoundly advanced phase of grammaticalization of such a commonly available device. While in several idioms, the locution remained periphrastic, in Biblical Hebrew the original analytic chain became synthetic having been fused into an inseparable form, a new conjugation *wayyiqtol*.

5.   CONCLUSION

5.1.   DYNAMIC DEFINITION

The above introduced evidence with respect to the semantic and function properties of the *wayyiqtol* and its homologues in other Semitic languages enabled us to define the BH gram as a prototypical advanced resultative diachrony additionally contextualized by the incorporation of an entity with, originally, an explicit consecutive meaning.

Following the panchronic technique, we began our analysis with a detailed study of the semantic and functional potential of the formation in Biblical Hebrew. After that, we have hypothesized that this inventory of uses—which from a synchronic perspective appears as chaotic and heterogeneous—may receive an ordered, rational and homogeneous form if one explains it as a manifestation of a universal evolutionary scenario, i.e. the resultative path. In particular, two sub-tracks of the resultative cline have been employed in order to classify the gram: the anterior and simultaneous trajectories. This means that the range of meanings displayed by the construction matches consecutive stages of the two emblematic evolutionary scenarios within the resultative path. Values related to perfect (various types of the present perfect) and (indefinite and definite) past functions have been arranged into a series which corresponds to the development codified in the anterior path. The values of the future tense and past perfect (pluperfect) were explained as stages of the anterior trajectory within, respectively, the future and past temporal frame. Meanings of the *wayyiqtol* derived from static roots have been similarly categorized into the simultaneous track.

We have also observed that the formation must have advanced on the evolutionary cline due to the fact that it is not employed with the resultative proper and performative force, meanings which correspond to two initial stages on the anterior path. Furthermore, the construction fails to indicate evidential situations; there are no values which could be arranged in terms of the evidential trajectory. In all of these uses, it is the *qatal*—a novel resultative diachrony—which is employed instead of the *wayyiqtol*.[39]

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[39] This synchronic interaction with the younger resultative diachrony *qatal* also confirms the proposed definition of the *wayyiqtol* since it behaves as a prototypical resultative doughnut gram. Additionally, the fact that the younger resultative expresses evidential values, while the older is incapable to provide such modal connotations, is typologically a well-documented phenomenon. Aikhenvald (2004:112-117 and 279-281) notes that if a language possesses two anterior diachronies (two grams that provide uses corresponding to stages on the anterior path, e.g. perfect and past) the younger—and not the older—normally conveys evidential meaning.

Finally, discourse pragmatic properties reflect a regular grammaticalization spread of a resultative gram within different types of text, suggesting a highly advanced stage of the evolution of the *wayyiqtol*: the expression infrequently appears in the discourse with a commenting force. It is more extensively used in personal narratives where it introduces commentaries and, especially, events of the backbone of the story. However, in its main function, it is employed in the narration proper to relate main events of the tale.

Consequently, discourse pragmatic uses of the gram have been related to the TATM character of the construction. Both kinds of properties enabled us to hypothesize a panchronic definition of the *wayyiqtol* as a resultative diachrony at an advanced moment of its development. On the other hand, we have noted that the consecutive meaning—not present on the resultative path—must have stemmed from a (lexical or syntactical) contextualization of the originally resultative formation.

As required by the panchronic method, this definition of the gram—deduced from the synchronic evidence—was subsequently contrasted with diachronic and comparative data. A diachronic study (i.e., the origin and posterior development of the formation) confirmed our classification of the *wayyiqtol*. The verbal segment of the gram, the entity *-yiqtol* derives from the PS resultative diachrony **yaqtul*. This PS expression originated in a semantically transparent, cognitively plausible and a typologically frequent device in deriving resultative grams: verbal adjective or resultative participle. Consecutive connotations of the BH expression stem from the absorption of an originally extern element, appearing in Biblical Hebrew as *wa-*R, derived, at least in part, from the PS conjunction **wa*. This lexeme acquired an explicit coordinative-consecutive signification due to the functional corrosion and ultimate loss of the particle **pa*. As for the posterior development of the *wayyiqtol*, its disappearance and substitution in Rabbinic Hebrew by a novel resultative diachrony *qatal* confirms the identification of the gram with highly advanced stages of the resultative path.

Finally, the comparative study corroborates the classification of the *wayyiqtol*. First, in all Semitic idioms, both homologues of the BH formation (successors of the earlier periphrasis **wa-* +? + **yaqtul*) and equivalents of the segment *-yiqtol* (successors of the PS **yaqtul*) convey meanings that match terminal stages of the resultative trajectory and grammaticalization cline. As for the consecutive connotation of the *wayyiqtol*—imported from incorporation of the coordinative-consecutive lexeme built on the PS lexeme **wa*—we have observed that the use of coordinative-consecutive particles with successors of the PS **yaqtul* (and/or with other resultative type grams) is frequent in the Semitic family. In Biblical Hebrew this—originally, and still usually periphrastic—ability was entirely grammaticalized receiving a synthetic shape.

In sum, we may affirm that all three types of the panchronic analysis lead to the identical conclusion: the *wayyiqtol* is a profound-

ly developed resultative diachrony. It can be defined as a computation of the anterior and simultaneous trajectories in the three time frames (with the exception of the resultative proper and performative meaning-stages) spread to narrative discourse and narration proper (properly discursive force of commentary, matching a level where resultative formation commonly originate, has been weakened). Such a geometric dynamic definition—contrary to simplistic views—accounts for the entire semantic and pragmatic potential of the gram. Furthermore, it is not restricted to taxonomy (although it is certainly based on an inventory of uses). Finally, it offers a concise (but yet rich!), formalized and scientifically manageable classification of the gram.

5.2. HOW DOES THIS DEFINITION DIFFER FROM THE EXPLANATION PROPOSED BY COOK (2002)?

This paper tentatively offers a new and, in my opinion, more appropriate classification of the *wayyiqtol*, as it explains the BH gram as a dynamic phenomenon. For that purpose, I have employed evolutionary laws established by the path and grammaticalization theories. It should be noted that, not for the first time, these universal diachronic scenarios are used in elucidating the nature of the BH verbal system. Among scholars who included evolutionary ideas in their linguistic analysis, a special place should be given to John Cook (2001, 2002, 2004 and 2006) who, thus far, has made the most consistent and significant use of grammaticalization and path theories in a description of the BH verbal system. Since both Cook and the author of this article apply findings of the evolutionary framework, it becomes important to demonstrate how our definition surpasses that proposed by Cook. The following discussion is an abbreviated version of the critical analysis of Cook's model developed by the author in the article "The Biblical Hebrew verbal system in light of grammaticalization—the second generation" (Andrason 2011a).[40]

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[40] The criticism of the position defended by John Cook—a scholar whom I profoundly admire and to whom I am deeply indebted (his research has inspired me to develop my own model)—should not be understood as undermining his impact on and relevance for the description of the BH verbal system. Cook is a great pioneer of the use of grammaticalization phenomena to diachronic and, to an extent, synchronic studies of the BH verb. The brightness and revolutionary force of his founding should not be disregarded. My model is not thought to be an opposition to that developed by Cook. Quite the reverse, it is intended to be a natural continuation and improvement of Cook's ideas, which are still in many aspects correct. In this section I emphasize differences between my theory and the description proposed by Cook. However, it should be noted that in various points the two studies coincide and provide similar solutions. Due to the length of the article, when presenting main discrepancies between my study and Cook's position (and thus, when indicating main

In general terms, Cook's approach and conclusions differ from those presented here in five aspects. First, Cook makes use of universal evolutionary scenarios to elucidate certain diachronic processes, but not to rationalize a synchronic state of the BH language. He certainly offers a diachronic-typological explanation for the range of uses and meanings displayed by the BH—synchronically viewed—verb forms (*qatal*, *yiqtol*, *weqatal*, *wayyiqtol* and *qotel*). Nevertheless, following the grammatical tradition, he comprehends BH formations as static outcomes of determined diachronic trajectories. He employs semantic-functional clines to justify a given evolutionary stage (i.e., a single phase on a pathway) which a formation reached. He fails, however, to account for all meanings provided by a gram—he does not view it as a portion of the evolutionary scenario it traveled along. His method consists in extrapolating one "dominant" static value. This *über*-function can, subsequently, be contextually modified triggering various secondary functions. All of them are thus derivable from the main meaning-stage (Cook 2002:270–271). Second, such a traditionally motionless interpretation conducts Cook to an erroneous—and as explained above, impossible within the evolutionary grammaticalization framework which Cook claims to adopt—reduction of BH grams to a single label-function, corresponding to a solitary stage on an evolutionary pathway. As many other grammarians, Cook struggles to find an inert 'one-sided' classification in terms of a tense or an aspect (Cook 2002:269 and 2008:11). It should be noted that one of the main questions posited by Cook is the following: is the BH verbal system an aspectual or temporal organization? Third, basing his research on the customary flat one-stage description of grammatical units, Cook (2002:203–204) classifies the BH verbal system as controlled by a dual contrast between the *qatal* (defined as perfective aspect) and the *yiqtol* (categorized as imperfective aspect). Forth, Cook (2002, 2004 and 2006) does not reconstruct cognitively plausible, semantically transparent iconic starting points for the paths along which the BH formations developed. Fifth, Cook (2002) considerably oversimplifies determined trajectories reducing them to a few stages. Among all these limitations, three are of special importance. Namely, the constant use of motionless one-stage definitions, the dichotomy between the main (built-in) meaning and contextual realizations, and the claim of a binary opposition between verbal categories (and a dualist foundation of the BH system in general) are on shaky grounds within the grammaticalization and path frameworks. As indicated in the previous sections of the paper, the attitude of the evolutionary approach toward these issues is antithetic.

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weaknesses of Cook's model) I will limit myself to a general overview. For a thorough argumentation, supported by various examples, see Andrason 2011a.

As for the *wayyiqtol*, Cook duly affirms that the formation developed along the resultative path (in his vocabulary 'perfective path'). However, his synchronic classification of the construction is less convincing. In his opinion, in Classical Biblical Hebrew, the gram has achieved the past tense stage. This is a so-called inherent main value of the *wayyiqtol*. Uses with a properly anterior force (present perfect and pluperfect) as well as perfective meanings are contextually imposed (Cook 2002:253–254). Thus, on the one hand, the *wayyiqtol* is an archetypal simple past (Cook 2002:253) and, on the other, it can function as a past perfect, a present perfect and a resultative present perfect (it also appears with a gnomic expression sense, Cook 2002:224–225, 253–255). From such a view, a synchronic paradox emerges: the *wayyiqtol* is a prototypical simple past which may, in some cases, correspond to perfect(s) and present grams. His argumentation is based on the claim that the BH gram supposedly is unable to denote future events. Consequently, it *must* be classified as a past tense (2002:255). First, the assumption whereby the *wayyiqtol* never expresses future activities seems to be too radical. In some—certainly, infrequent—instances, the gram can receive a future reading (cf. example 8 above). Most importantly, the supposition according to which a construction, which in its most frequent uses indicates past events or situations, cannot refer to future temporal sphere is wrong. Paradoxically, so-called past tenses can sometimes be employed to convey future meaning!

Second, in accordance with principles of the path theory, a gram, used in the majority of cases as a definite (perfective or aspectually neutral) past can preserve certain marginal functions which match earlier phases of its functional progression. We have previously explained that verbal entities are amalgams of properties that reflect historical stages during which they have emerged. This means that during its grammatical life a construction undergoes two types of evolutionary processes: the incorporation of new meaning-stages and the loss of formerly conquered and assimilated values-phases. The two phenomena are, to an extent, autonomous and self-governing. This means that the expansion on the given developmental cline does not signify that more original segments must be lost. Quite the reverse, values which correspond to the initial fragment of the path—in our case of the resultative track— may be still, even marginally, available once the gram has reached profoundly developed sections, such as the definite past stage (see for instance, the *passé composé* in French which, although it commonly denotes simple or perfective past activities, may still be used in some present and future functions).

Finally, Cook, when equaling the *wayyiqtol* with a definite past category—ignores the fact that the gram displays a functional split between dynamic and stative roots, prototypical for resultative diachronies: the former follow the anterior track while the latter travel along the simultaneous pathway. In sum, one may encounter examples whereby the BH formation fails to behave as a definite

past, which, in turn, renders its classification as a past tense highly doubtful.

5.3. *WEAK POINTS AND FUTURE RESEARCH*

Although our research explains the nature of the BH *wayyiqtol*, encompassing virtually all of its semantic and functional variants, superficial irregularities and anomalies, providing furthermore a concise non-reductionist definition, it does not specify—in a consistent and regular manner—which of the encountered values are the most common and which are the rarest. In general, the model proposed here does not determine the frequency (and thus coreness and periphericity) of meanings-stages displayed by a grammatical construction, in our case the *wayyiqtol*.

The above noted limitation constitutes the main weak point of our classification. Such quantitative information, built on an extensive statistical investigation, is necessary in order to determine the exact state of the gram, and therefore this kind of examination must inevitably constitute a future step in elucidating the nature of the BH formation. Therefore an extensive statistical analysis is planned by the author during his post-doctoral research activity at the University of Stellenbosch in late 2011.

This statistical research is aimed at elucidating, at least, two issues. First, it will establish which meanings-states are central (i.e. common) and which are peripheral (and thus exceptional). In that manner, we will hopefully be able to arrange values of the gram in a hierarchical ladder from least to most frequent. Second, it will determine in a more adequate fashion the relation between two resultative diachronies, the *wayyiqtol* and the *qatal*. Having specified core and peripheral values of the *wayyiqtol*—as well as those of the *qatal*—we will be able to answer the following question: Do domains shared by the two grams overlap? In other words, do the *wayyiqtol* and the *qatal* cover similar portions of the resultative path? If they do, with what intensity does the intersection occur?—one, for instance, expects that the two formations do not overlap as for their core domain. This intuitive supposition must be studied and supported by quantitative data.

It was also mentioned that in the present article Biblical Hebrew was treated as a single linguistic organization despite the fact that BH books had been written over a thousand year period. The temporal extent of Biblical Hebrew obviously suggests that—in accordance with the dynamic view—the *state* of the *wayyiqtol* in early (Early Biblical Hebrew) and in later texts (Late Biblical Hebrew) should be different. The former is expected to be less advanced: all meanings in general—and the core value in particular—should correspond to less developed stages of the path(s). Also this supposition will be verified and clarified by the future statistical research. Once the exact statistical distribution of meanings-stages of the *wayyiqtol* in various parts of the Bible has been established, we will be able to distinguish how the precise composition of the state

of the formation (percentage of each meaning-stage) fluctuates among biblical books and historical periods.

SUMMARY

This article provides a concise, non-reductionist and non-taxonomist synchronically valid definition of the Biblical Hebrew verbal construction labeled *wayyiqtol*. Basing his proposal on findings of evolutionary linguistics (to which belong grammaticalization, path and chaos theories as well as cognitive linguistics) and employing the panchronic methodology, the author demonstrates the following: all semantic and functional properties (such as taxis, aspectual, temporal, modal and discourse-pragmatic values) of the *wayyiqtol*—as distinct and superficially incongruent they appear—may be unified and rationalized as a single dynamic category: advanced portions of the anterior and simultaneous trajectories (which constitute two sub-clines of the resultative path), developed within the three temporal spheres and, additionally, contextualized by the incorporation of an originally independent lexeme with a coordinative-consecutive force.

The author constructs his thesis enumerating various properties of the formation as witnessed in the Biblical material. This supposedly chaotic synchronic inventory is subsequently tidied up in accordance with the orderliness principle (imposed by the abductive type of argumentation) and pictured as a computation of portions of the two above-mentioned universal evolutionary scenarios. After that, the hypothesis is verified by diachronic (Proto-Semitic origin, cognitive basis and posterior development of the expression) and comparative evidences (properties of genetically related constructions in other Semitic languages). Having presented a new classification of the wayyiqtol, the author also shows how this proposal differs from another grammaticalization based model established by Cook (2002) and, finally, indicating certain weaknesses of his own explanation, sketches a plan for future research.

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