From resultatives to present tenses. Simultaneous path of resultative constructions

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This article determines a sequence of stages that form the 'simultaneous path', a linear progression according to which certain resultative expressions develop into present tenses. First, the author hypothesizes that this type of evolution is expected to be analogous to the orderliness of the other well-established development of resultative grams during which resultative inputs evolve into anteriors, perfectives and past grams (the anterior path) traversing three verbal domains (i.e. taxis, aspect and tense). The theorized shape of the simultaneous path (from simultaneous resultatives, through statives and towards simple presents) is subsequently corroborated by a methodology referred to as 'dynamization of typology'. It is demonstrated that meanings provided by concrete grams – successors of resultative expressions – can be matched with the three hypothesized phases of this developmental path.

1. Introduction: Resultatives and their development

1.1 Generalities: Semantic composition of resultatives and their evolution

Resultatives (such as the English periphrasis *it is written* or *he is gone*) are defined as semantically bi-member entities that provide two distinct (but certainly connected) portions of temporal and logical information. The category expresses a static quality of a being or thing, viewed as resulting from a previously performed activity. Thus, the formation includes two semantic planes, δ_1 and δ_2, related temporally and logically to each other. The former (δ_1) belongs to the time sphere of precedence and points to a dynamic activity which has already occurred – this prior event constitutes the very cause of the information included in the other portion of the resultative composite. The latter (δ_2) indicates a static condition, simultaneous [1] to the main reference time and posterior to the event from which it has emerged – this posterior effect is portrayed as a consequence of a given activity expressed by the other part of the resultative compound (Maslov 1988: 64; Jaxontov 1988: 101 and Sil'nickij 1988: 88, 96-97). The internal structure of a resultative construction can be schematized in the following way (cf. Figure 1):

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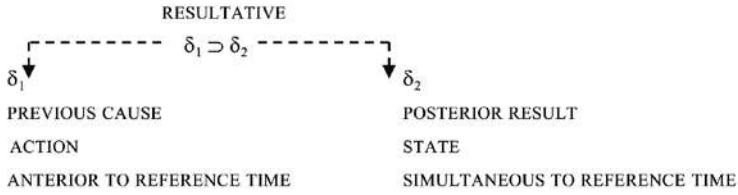

Figure 1: *The structure of a resultative construction according to Maslov (1988: 64) and Bybee et al. (1994: 54, 63).*

It has been hypothesized that during the development of resultative formations one of the two segments, available in the original meaning, gains in relevance. This means that when the availability to one section of the bi-member compound is gradually strengthened, the importance of the other is progressively minimized (Maslov 1988: 64; Bybee et al. 1994: 74-78, 81-87, 104-105). Thus, the inherent semantic complexity causes a change whereby either the segment δ_1 (precedence) or δ_2 (consequence) of a resultative sequence is highlighted: the initial semantically bi-member entity is gradually "fractionated". In general terms, focusing on the prior plane (and hence on the causing action) converses a resultative construction into an anterior (a perfect) and next into a past. Likewise, emphasizing the posterior plane (corresponding to the resulting state) triggers a change whereby the gram (a grammatical formation/entity/construction/locution/morpheme) develops into a present tense.

While the conversion of resultatives into perfects and past tenses has intensely been studied and the development, itself, codified in a detailed evolutionary model labeled 'anterior path' (as well as, its subcategory, 'evidential path', cf. §§ 1.2.1 and 1.2.2), the transformation into present tenses has not received a similar attention. Most importantly, the change has not been formalized into a series of ordered consecutive stages. The present paper intends to rectify this weak point in our comprehension of the grammatical life of resultative grams, by establishing a more complete model of their transformation into present tenses and thus portraying the change as a unidirectional sequence of phases leading from a resultative input to a temporarily present outcome.

In order to provide a more exhaustive outline of the transformation of resultatives into present tenses (to this development we will refer to a 'simultaneous path'), one must first comprehend the principles of evolution of grams (§ 1.2). Meeting this requirement, two dominant evolutionary patterns affecting resultative grams – i.e. the anterior path (§ 1.2.1) and the evidential path (§ 1.2.2) – will be described and explained in depth. This will subsequently enable us to hypothesize the structure of the simultaneous track because, as will be theorized, the conversion of resultatives into presents should be analogous to the orderliness of the remaining well-established evolutionary scenarios (§ 1.3). Put differently, the shape of the simultaneous cline is expected to harmonize with general rules of the development of grams, as well as fundamentally resemble the other developmental pathways along which resultative inputs evolve. This theoretically posited organization of the simultaneous path will afterwards be corroborated by typological evidence (§ 2). More specifically, the methodology of dynamization of typology (intra-linguistic, cf. § 2.1; and inter-linguistic, cf. § 2.2) will permit us to demonstrate that meanings provided by successors of original resultative expressions or by constructions that otherwise have developed along the anterior path can be matched with the hypothesized segments of the simultaneous path. Having meticulously analyzed the senses conveyed by formations in various Semitic, Indo-European, Altaic and Niger-Congo tongues, and more importantly having elucidated their equivalence with a concrete developmental episode, an overview of further grammatical constructions, which additionally substantiate our proposal, will be provided (§ 2.3). After that, in the last part of the paper, main conclusions will be formulated and the entire model of the simultaneous trajectory designed (cf. § 3.1). Finally, we will explain certain weak points and inadequacies of the model, proposing the manner of their correction and thus sketching a necessary program of future research. [2]

1.2 Resultative path and its sub-clines [3]

The resultative path is an idealized evolutionary model which codifies a complex and multidimensional development of original resultative inputs. To be exact, it governs the order according to which resultative expressions acquire new senses and properties (see § 3.2 below). In the present paper, this general evolution of resultatives formations will be split into three more specific pathways: anterior, evidential and simultaneous tracks. Each one of them consists of various consecutive stages, arranged into a linear unidirectional progression, viz. a cline.

Before analyzing in more detail the properties of the three specific trajectories, one should acknowledge the following general characteristic of the evolution of verbal constructions. Various researchers have shown that semantically transparent verbal inputs begin their grammatical life as expressions of taxis. [4] Later, during their development into central verbal categories, such taxis expressions evolve into aspects, which subsequently transmute into tenses (cf. for instance, the imperfective path in Bybee et al. 1994, see also Dahl 2000: 11-15 and Heine & Kuteva 2007: 74-75, 90-91, 305). This means that from the evolutionary perspective, expressions of anteriority, simultaneity (or prospectivity) give rise to tenses (past, present and future respectively) through categories of aspect (perfective and imperfective). [5]

1.2.1 Anterior path

We have already mentioned that the anterior path [6] corresponds to the most common and best known law governing the development of resultative constructions. According to this evolutionary scenario, resultative inputs frequently develop into anteriors (perfects) and, next, into past tenses, passing through the stage where they function as perfective (past) aspects (cf. for instance, Harris 1982; Maslov 1988: 70-85; Bybee et al. 1994: 105; Drinka 1998: 119-120, 128-130; Dahl 2000: 15; Bertinetto & Squartini 2000: 406, 422; Lindstedt 2000: 378-379).

More specifically, the anterior path originates in a broad range of semantically transparent lexical periphrases that express a resultative (or completive) value (Bybee et al. 1994: 55-57, 104-105; Dahl 2000: 15; Squartini & Bertinetto 2000: 406-407 and Heine & Kuteva 2006: 151). When employed with the present temporal reference, such lexical inputs regularly generate a present resultative proper which subsequently evolves into a present anterior (i.e. present perfect; cf. Bybee et al. 1994: 51-105 and Dahl 2000: 14-16). The conversion into a present anterior (present perfect) is not an abrupt single change but includes a series of consecutive intermediate stages (Harris 1982; Squartini & Bertinetto 2000: 406-419; Lindstedt 2000: 379 and Mitkovska & Bužarovska 2008: 136). The original resultative proper first evolves into an inclusive anterior, [7] next into a resultative anterior [8] and frequentative anterior, [9] and finally acquires the value of an experiential anterior. [10] When the formation is generalized as an anterior category, it typically introduces events that have occurred in a past time frame without, however, specifying their exact temporal location. Such an indefinite past value is a linking stage between the present anterior and a subsequent evolutionary phase: a definite past (Lindstedt 2000: 369, 379). [11]

Once the present anterior is acceptable with specific past time adverbials or in explicit past contexts, the formation acquires the meaning of a definite past. Similarly to the expansion of present anterior uses, the generalization of a gram in a definite past sphere involves several intermediate steps. In general terms, a past expression (derived from an original anterior and resultative present) gradually increases the degree of remoteness (temporal distance) from the enunciator's here-and-now (Bybee et al. 1994: 98; Squartini & Bertinetto 2000: 414-417, 422). First, the construction is acceptable in explicit past environments that locate a given event in today (hodiernal past) [12] and, at a next evolutionary stage, yesterday's time frame (hesternal past). [13] After that, the gram is employed as a recent past tense. Subsequently, the formation progressively expresses more remote past events, functioning as a general past or, in more advanced phases, as a remote and ancient past.

It should be noted that during the conversion of a present anterior into a definite past, it is possible to detect a gradual weakening of the relevance of a previously performed action for the present state of affairs. This means that as the present anterior (old resultative) evolves, its original current relevance character first diminishes and finally is entirely lost. Consequently, a temporarily present gram is transmuted into a past, increasing not only its temporal (cf. the previous paragraph) but also cognitive distance from the enunciator's world (Lindstedt 2000: 365-366, 369-371).

During the transformation into a definite past tense, the anterior may receive an explicit aspectual load, functioning as a perfective past. The acquisition of a marked aspectual character is particularly frequent in languages whose verbal systems have previously included a past tense, in particular an imperfective one (Bybee et al. 1994: 81-87 and Drinka 1998: 120). At a later developmental stage, the perfective past gradually loses its aspectual tone and develops into a simple – i.e. aspectually neutral – past (Bybee et al. 1994: 92-93). It should be noted, however, that in various linguistic systems the development from an anterior into a definite simple past does not require an intermediate stage of the perfective past. In other words, a definite simple past stage may directly follow typical anterior (present perfect) phases (Bybee et al. 1994: 83-86 and Heine & Kuteva 2006: 151). A complete model of the development of resultative constructions may be summarized as follows (Figure 2):

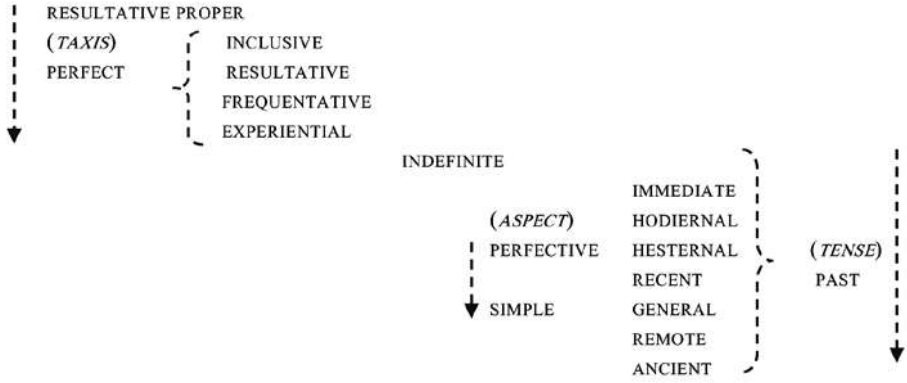

Figure 2: *The anterior path-law within the present time frame.* [15]

The path-law, sketched above, governs the evolution of resultative inputs when such forms are originally employed within a present time frame. Nevertheless, resultative constructions may be also used with the past and future temporal reference, generating past anteriors (pluperfects) and future anteriors, respectively. Such past and future perfects can subsequently develop into tenses, namely, into a remote past [16] and a simple future. More frequently, however, at later stages of their grammatical existence, past and future anteriors disappear, being lost more rapidly than their present counterparts (i.e. resultative inputs that evolve along the anterior path in a present time frame). [17] Finally, it shall be observed that the development of resultative constructions, which has been presented in this section, fully concords with the main evolutionary pattern designed for verbal formations (see § 1.2, above; cf. also Heine & Kuteva 2007: 59, 74-75, 91). In harmony with this "meta-principle", throughout the evolution of resultative constructions, one can distinguish three main phases: a taxis sense (anterior) precedes a facultative aspectual function (perfective), from which a tense value emerges (past tense).

1.2.2 Evidential path

The anterior path – in the shape presented above – is the most common and the best understood law controlling the development of resultative formations. Nevertheless, it does not codify all possible evolutionary scenarios according to which such constructions may develop. That is to say, it is insensitive to a phenomenon (quite frequently encountered during the conversion of resultatives into

perfects and past tenses) whereby resultative inputs give rise to evidential categories (on the relation between evidential categories and anteriors, see already Comrie 1976 and Dahl 1985).

Analogically to what we have observed during the formation of anteriors and past tenses, the rise of evidential categories from properly resultative input locutions consists of several consecutive well-ordered stages. We have already explained that resultative grams originally indicate contemporarily persistent states understood as effects of formerly performed activities. Such ensuing situations are relevant to the cognitive area of the speaker's here-and-now (Comrie 1976 and Johanson 2000). Applying general human deductive capacity to perceivable results, the subject may infer that – although he has himself not witnessed the event that led to the creation of a present state – the action in question must have occurred. At this stage, the resultative acquires an inferential and indirect sense. [18] Subsequently, conclusions can be based not only on visible traces but also on a general knowledge (common and universal assumptions) and on hearsays or rumors. [19] During the next evolutionary phase, the gram gains a more explicit reportative character and functions as a referential category. At this stage, the formation turns into a general evidential gram that is able to introduce a wide scope of non-first hand values (Aikhenvald 2004: 112-117, 279-281). [20] Even later, when the old resultative form has evolved into a prototypical evidential category, it may acquire further modal extensions and, expressing probability and doubts, it can approximate a non-indicative mood (Aikhenvald 2004: 116).

It should be acknowledged that grams that develop along the evidential cline usually display a concurrent progression, following the anterior trajectory: they not only gradually develop inferential, referential and modal senses but likewise acquire present perfect, perfective and past values (cf. the Turkish *miş* perfect or past as well as the Mandinka gram *banta*; Andrason 2013a). This entire – highly complex – process may be graphically represented by the following figure (Figure 3):

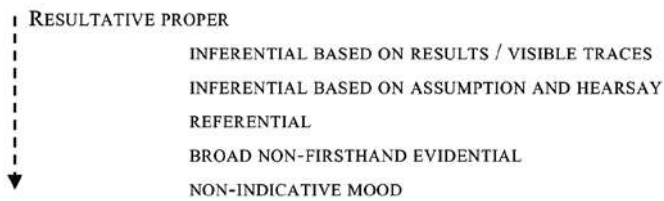

Figure 3: *Evidential development of resultative constructions.* [21]

1.3 Simultaneous path: Constructing the hypothesis

In the previous sections, we have described two prototypical evolutionary scenarios governing the grammatical life of resultative proper formations. As noted by several scholars, the fientive value which sets in motion the anterior (and hence, evidential) path is usually compatible with dynamic predicates (i.e. with verbs that indicate a change of state or an event that produces such a change of state; Bybee et al. 1994: 65, 69). In other words, dynamic roots employed in resultative proper expressions tend to develop in accordance with the anterior and, although less commonly, evidential paths.

On the contrary, when static [22] verbs (as well as certain dynamic predicates which lend themselves to stative inferences) [23] are employed in resultative and, later, in anterior morphologies, they show a propensity to indicate that 'a present state exists' (Bybee et al. 1994: 74-78). The phenomenon whereby static predicates in resultative or anterior constructions yield stative present or even simple present readings has been widely recognized and already detected in a number of languages (cf. for instance, Maslov 1988 and Bybee et al. 1994). This functional "split", available already at the original stage of the evolution of resultative grams, may clearly be observed in the Mandinka language (Mande, Niger-Kongo). In Mandinka, dynamic roots employed in the BE RIŋ formation (a resultative construction) are more propitious to offer resultative proper and perfect senses (*a be katiriŋ* 'it is broken / it has been broken') while non-dynamic predicates typically provide stative readings (*a be koyiriŋ* 'he is white'; cf. Andrason 2013b)).

Consequently, the well-known behavior of resultatives suggests the following: certain verbs (most commonly static predicates and some dynamic roots which are predisposed for static inferences) when employed in originally resultative formations (functioning as anteriors or, at more advanced stages of the development, as past tenses) can indicate present states and/or present activities. Thus, they seem to display an opposite developmental inclination (towards stative and present senses) to that which is typical of dynamic roots (these predicates usually evolve towards dynamic perfect and past senses).

Before presenting a model of the simultaneous trajectory (viz. the structure of a progression whereby resultatives and anteriors come to indicate present states), we shall first return to the inner semantic arrangement of resultative expressions. In § 1 above, we stated that an original resultative locution is a semantically complex entity that includes two related planes: (a) a prior cause or a

dynamic action previously performed (the segment δ_1); and (b) a posterior result or an acquired state, simultaneous to the utterance moment (the segment δ_2; cf. Bybee et al. 1994: 63, 69). As explained, the emphasis on the plan δ_1 triggers the development along the above sketched anterior trajectory (activating also in some cases the evidential path). Conversely, the stress on the portion δ_2 of the meaning generates the evolution towards the present (Maslov 1988 and Bybee et al. 1994: 74-78). As far as the anterior (and also evidential) trajectory is concerned, the emphasis on the prior cause d_1 triggers a unidirectional well-ordered progression, which – as already mentioned – agrees with the meta-principle of grams' evolution (taxis > aspect > tense). Namely, resultative proper expressions gradually transform into anteriors (perfects), perfective pasts and simple past categories. Furthermore, resultative grams progressively lose a nuance of current relevance and, on the other hand, increase their temporal and cognitive distance from the speaker's here-and-now.

If the simultaneous path stems from emphasizing the second portion of the original semantic sequence, viz. the resulting condition δ_1, this type of a resultative evolution is expected to be, to some extent, parallel to the order of the anterior track. Put differently, respecting the meta-principle of the growth of verbal constructions, it is expected to constitute a mirror image of the anterior cline: the emphasis on the plan δ_2 of the original resultative locution should generate an analogous type of the semantic advancement with the difference that this time the ultimate output is not the past but the present tense. Consequently, the gram is likely to traverse the three verbal domains in a similar order, viz. from the taxis towards the aspect, and next to the tense. Let us explain this parallelism in more detail.

While the anterior track, highlighting the preceding (anterior to the resultant state) cause, first converts the resultative input into an anterior gram (perfect), the emphasis on the result (posterior to the cause and simultaneous to the speaker's here-and-now) should generate simultaneous taxis grams. At that stage, the formation would express an ensuing state which is simultaneous to the reference time. As demonstrated in § 1.2.1, the anterior gram points to the prior action itself (Bybee et al. 1994: 65), the action being, nevertheless, relevant to the present moment (Bybee et al. 1994: 69). In an analogical manner, just like the anterior (perfect) is related to the present state of affairs, the simultaneous resultative is expected to be semantically linked to the past event that has produced currently available effects. This time, however, the main stress is laid on the outcome of a given activity. Consequently, in comparison with the increase in the

distance of anterior grams, simultaneous formations hypothetically gradually diminish the significance of a prior action and thus the importance of a past portion of the conveyed information. Thus, conversely to the anterior track during which the gram gradually loses the value of current relevance, in the course of the simultaneous path, the formation is expected to eliminate the current "irrelevance" sense. In other words, the idea of an event which has led to the formation of a given present (actual and persistent) state is assumed to be increasingly obsolete and irrelevant for the meaning provided by the gram. What matters is an acquired condition which is simultaneous to the main time frame.

All of this means that the connection between the acquired condition and the event that constitutes its origin – exactly as in the case of anterior (present perfect) grams – should gradually be lost. In the case of the anterior path, we have noted that when the availability to the ensuing plane (δ_2) has vanished, the remaining portion of the value corresponds to an action. This time, however, once the relation between cause/action and effect/state is absent, the only recoverable meaning corresponds to an acquired state. Inversely, any connotation of the prior action that has triggered this current situation is lost. In that manner, a stative gram would be formed. Hence, in contrast to the anterior cline (but yet displaying the same type of "mutation"), the simultaneous track should theoretically lead to the loss of the anterior portion δ_1 of the original complex meaning: what is left corresponds to non-dynamic conditions, a stative. [24]

It shall be noted that in this paper, the stative is understood as an aspectual type due to the following reasons (see, also Hackert 2004: 161-162). First, as noted by Maslov (1988: 67) in respect to Slavic languages such as Russian, when the anterior (e.g. a periphrasis built on the perfective *n/t* participle) morphology denotes a state, it conveys the meaning of duration (1a) and is akin to the imperfective aspect of a corresponding verb (1b):

(1) a. Kartina povešena. [25]
picture hung_up.PTCP.SG.F
'The picture is hung up'.

b. Kartina visit.
picture hang_up.PRS.3SG
'The picture hangs / is hanging'.

Second, in accordance with Comrie (1976) and Kackert (2004: 161), the stative (grammatical) and static (lexical) value is a portion of the imperfective aspectual domain and therefore stative morphologies or static predicates are the last ones in combining with the progressive-imperfective morphology (activity verbs such as *write*, *play* or *go* are more propitious in entering in progressive-imperfective constructions). It is important to observe that in various languages present tense forms which derive from an anterior morphology (i.e. from present perfects) do not admit the use of a progressive or imperfective pattern (cf., for instance, preterite-present verbs in Icelandic). [26] And third, in many languages, stative present expressions interact with a dynamic "normal" present leading to the formation of an aspectual contrast between the two constructions, i.e. between a state (1a) and an activity (1b). This phenomenon profoundly echoes the above-mentioned interaction between the perfective and imperfective grams. [27]

At the end of the hypothesized development – just like the emphasis on the anteriority of the speaker's here-and-now justifies the conversion of resultatives (used as perfects or perfectives) into past tenses – the importance given to the simultaneity with the speaker's world is likely to motivate the transformation of resultative constructions (now employed as statives) into present grams. Thus, in a present time frame, at the moment where a stative value ceases to be palpable, the expression turns into a general present tense. Concurrently, functional and morphological differences between the simple and stative presents are expected to disappear: the two types of grams converge into a general broad present. This means that, at this stage, we would expect old stative presents to become acceptable in progressive formations. Additionally, their 'past' morphological marking should most probably be abandoned or perceived as irrecoverable. Put simply, the stative present should become identical to the dynamic one.

To conclude, we may suggest that the simultaneous path, due to the emphasis of the other portion of the initial semantic load, should display a mirror development to that which has been attested along the anterior trajectory. As mentioned above, this evolution would be expected to affect static verbs as well as predicates whose resultative and/or anterior uses may logically imply a static reading. The entire hypothesized transformation of resultative proper expressions into present tenses may be summarized in the following manner (Figure 4).

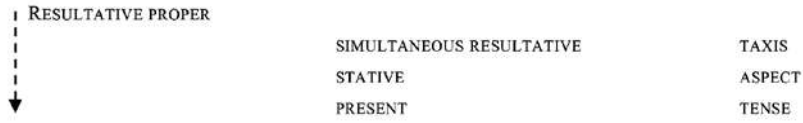

Figure 4: *A theoretically postulated model of the simultaneous path.* [28]

In order to corroborate the above sketched evolutionary scenario, we will make use of the methodology of dynamization of typology. Employing this method, we will demonstrate that it is possible to encounter languages where original resultative expressions display uses which correspond to one of the three hypothesized phases of the simultaneous path, i.e. stages where a gram functions as a simultaneous resultative, a stative and a present tense.

2. Dynamization of typology: Verifying the hypothesis

Dynamization of typology enables linguists to interpret synchronic evidence as phases of diachronic processes (Greenberg 1978: 75 and Croft 2003: 235). Thus, given a set of synchronically attested data one may infer, reconstruct or verify certain historical claims and rules (Croft 2003: 272; observe that a similar principle operates in internal reconstruction, Kuryłowicz 1964).

In this paper we will distinguish two kinds of dynamization. The first one – labeled here 'intra-language dynamization' – is used in the study of evidence provided by a single linguistic organization: various functions and properties displayed by a gram in a concrete idiom may be viewed as phases of a universal evolutionary process. More specifically, different senses of a form (its entire polysemy) are interpreted as relics of previous developmental stages (Croft 2003: 233, 272). The other sub-type may be applied to typologically similar formations in various – related or not – languages. [29] To this type of dynamization we will refer as 'inter-language' because it gives us opportunity to take into account and compare various idioms: grammatical entities in different linguistic organizations can correspond to distinct evolutionary stages of processes which, from the typological perspective, are identical. We can understand values and characteristics displayed by typologically analogous grams in various tongues as vestiges or, metaphorically speaking, "frozen" pictures of their evolution. Since such grams are considered to belong to the same typological type, their evolution should similarly be typologically comparable. [30]

The two subcategories of dynamization result from a universal and unidirectional character of evolutionary trajectories. Grams acquire new meanings following a pre-arranged order. Thus, each concrete (taxis, aspectual, temporal, pragmatic or any other) value displayed by a construction is incorporated at a distinct and strictly determined segment of the path. This means that a meaning *m* expressed by a formation *f* corresponds to a certain historical stage *s* during which the formation *f* began to be acceptable with the said meaning *m*. As a result, the synchronic load of a construction reflects its diachronic fate and, more precisely, the trajectory along which it has been evolving (see Heine et al. 1991: 251 and Andrason 2010a, 2010b, 2010c, 2011a and 2011b). This means that the synchronic qualities of a gram can be geometrically matched with a given universal path.

Consequently, if a certain developmental rule is supposed to consist of determined consecutive stages $s_1 \ldots s_{n,}$ one would expect the following two facts. First, a gram that is employed in a single linguistic organization is expected to display values which may be located on the suggested cline. In that manner, the gram's polysemy, viz. its diverse senses, should correspond to successive phases of the postulated path. And second, the hypothesized phases must be synchronically documented by grams belonging to various verbal systems. In other words, prototypical senses provided by verbal formations that exist in different languages should match evolutionary segments of a determined path.

As far as our hypothesis of the shape of the simultaneous trajectory is concerned, we expect to detect the following behavior of grams that has otherwise developed along the anterior cline (formations that provide senses of a present perfect, perfective and past, i.e. values located on the anterior track). First, we should find a gram whose polysemy could be matched with theorized stages of the simultaneous cline. Thus, it should be possible to arrange different senses conveyed by a form into a linear chain, mirroring the simultaneous path (intralinguistic dynamization). Furthermore, we should be able to encounter constructions whose prototypical value is compatible with one of the above-posited stages of the simultaneous path (as well as of the anterior path). *Summa summarum*, grams or morphologies whose semantic potential otherwise matches the anterior cline or grams that typically function as present perfects, perfectives or pasts, are compelled to:

a) convey senses of a simultaneous resultative, stative and/or present that all correspond to stages of the posited simultaneous path (intra-linguistic dynamization);
b) typically function as simultaneous resultatives, statives (stative presents), or simple present tenses (inter-linguistic dynamization).

In the following sections, we will demonstrate that the previously hypothesized shape of the simultaneous path is positively verified by evidence encountered by means of the dynamization of typology. First, the data extrapolated from the dynamization of an intra-language type will be discussed. In particular, we will show how certain meanings displayed by the Biblical Hebrew verbal form *qatal* validate our hypothesis. Second, we will apply an inter-language dynamization, proving that properties of various formations in different languages confirm the previously sketched sequence of the simultaneous trajectory. [31]

2.1 Intra-language dynamization

The Biblical Hebrew (BH) gram *qatal* has recently been defined as a manifestation of an exemplary anterior diachrony (Andersen 2000; Cook 2002: 219-220 and 2006: 34). This means that the formation provides meanings that correspond to consecutive stages of a grammatical development whereby original resultative lexical expressions develop into taxis, aspectual and deictic temporal grams following strictly predetermined principles as described in § 1 above. There is also a wide consensus in respect to the origin of the *qatal*. The formation derives from a predicative use of the resultative participle (verbal adjective) *qatVl-* to which personal pronouns have been agglutinated (Waltke & O'Connor 1990: 521-523; Smith 1991: 6-15; Lambdin & Huehnergard 1998; Kienast 2001 and Lipiński 2001: 514-515).

As expected, the values offered by the *qatal* reflect the most common evolutionary scenario within the resultative path, namely the anterior trajectory. Certain values of the gram mirror initial phases of this functional progression (resultative proper meaning), others match intermediate phases (various anterior meanings such as inclusive, iterative, experimental and indefinite perfects) and yet further correspond to its advanced segments (perfective past or discursive simple past; cf. Andrason 2011c).

Moreover, being a prototypical resultative diachrony and thus providing uses that mirror consecutive phases of the anterior cline, the *qatal* offers values which correspond to another sub-path of

the resultative trajectory, i.e. the evidential track, a path which, as already explained, is closely related to the anterior cline. That is to say, the functional-semantic load of the BH construction is not limited to meanings reflecting the anterior trajectory but also includes uses which are consistent with another common type of development, viz. the evidential cline. In particular, since the *qatal* offers a wide range of perfect uses (an intermediate stage of the development of resultative grams), in consonance with the universal proximity between anteriors and inferentials, it displays the function of a *guessing* perfect category. As demonstrated by Isaakson (2000: 387-388, 391, 397) and Andrason (2010c), the semantic potential of the BH gram includes the inferential domain: the *qatal* provides readings which overlap with two stages of the evidential path. During these phases a resultative and/or anterior formation conveys inferential meanings, either directly deduced from palpable physical evidence or generally assumed (cf. Figure 3, above).

On the other hand, various grammatical studies have detected a close connection between the BH *qatal* and stative or present meanings (see for instance, already Joüon 1923, and more recently Waltke & O'Connor 1990, Van der Merwe et al. 2000 and Cook 2002). In the following part of this section we will analyze this relation more profoundly, demonstrating that determined uses of the *qatal* reflect original (a simultaneous resultative), intermediate (a stative) and highly advanced (a present tense) stages of the simultaneous progression. All of this means that being a typical resultative diachrony (Andersen 2000, Cook 2002 and 2006, and Andrason 2010c), and thus offering uses that mirror subsequent stages of the anterior and evidential clines, the *qatal* also conveys meanings which correspond to the third – above-theorized resultative sub-path, viz. the simultaneous track.

The *qatal*, when derived from certain roots, indicates an acquired state which is simultaneous to the main reference time. In the present temporal sphere, the gram equals a present simultaneous resultative: a current condition results from a previously achieved action (2). The main emphasis is laid on the static effect while the event – the source of the present situation – is only merely suggested. In accordance with principles governing the evolution of resultative expressions as posited by Bybee et al. (1994), the roots which convey such values (and, as will be demonstrated below, other meanings that mirror subsequent stages on the simultaneous path) most frequently correspond to static predicates (e.g. adjectival roots) and to verbs that favor such a static interpretation (see Cook 2002 and 2006).

(2) a. יְדֵיכֶם דָּמִים **מָלֵאוּ**

yədēykem dāmîm **malē'û** [32]

hands_your blood **be_full.QATAL.3PL**

'Your hands are full (= have been filled with) of blood'. (Isa 1.15)

b. אֵל אָנִי מוֹשַׁב אֱלֹהִים **יָשַׁבְתִּי**

'ēl 'ānî môšab 'ĕlōhîm **yāšabtî**

God I seat_of Gods **sit.QATAL.1SG**

'I am a god; I am seated (= I have sat down) in the seat of the gods'. (Ezek 28.2)

c. וַיֹּאמֶר הִנֵּה־נָא **זָקַנְתִּי** לֹא יָדַעְתִּי יוֹם מוֹתִי

wayyômer hinnēh-nā' **zāqantî** lō' yāda'tî yôm môtî

he_said see **be_old.QATAL.1SG** not I_know day_of death_my

'He said: See, I am old (= I have become old); I do not know the day of my death'. (Gen 27.2)

In various cases there are no longer resultative connotations available (3a-c), and the gram equals a stative category. With a present temporal reference, a stative equals a stative present. In this function, the formation is limited to indicate current conditions and characteristics of a person or an object. Conversely, the relevance of the action which has led to their emergence – previously included in the semantic potential of the form – has entirely been lost:

(3) a. הַצִּילַנִי נָא מִיַּד אָחִי מִיַּד עֵשָׂו כִּי־**יָרֵא** אָנֹכִי אֹתוֹ

qāṭōntî mikkōl haḥăsādîm ûmikkol-hā' ĕmet 'ăšer

be_worth.QATAL.1SG from_all the_mercies and_from_all_the_truth that

āśîtā 'et- abdekā

you_have_done to servant_your

'He said: See, I am old (= I have become old); I do not know the day of my death'. (Gen 27.2)

b. מַה־**טֹּבוּ** אֹהָלֶיךָ יַעֲקֹב

māh-ṭōbû 'ōhāleykā ya'āqōb

what **be_fair.QATAL.3PL** tents_your Jacob

'How fair are your tents, O Jacob…!'. (Num 24.5)

c. קָטֹנְתִּי מִכֹּל הַחֲסָדִים וּמִכָּל־הָאֱמֶת אֲשֶׁר עָשִׂיתָ אֶת־עַבְדֶּךָ
qāṭōntî mikkōl haḥăsādîm ûmikkol-hā'ĕmeṯ 'ăšer
be_worth.qatal.1sg from_all the_mercies and_from_all_the_truth
'āśîṯā 'eṯ-'abdeḵā
that you_have_done to servant_your
'I am not worthy of the least of all the steadfast love and all the faithfulness that you have shown to your servant'. (Gen 32.11)

d. עֲצַת רְשָׁעִים רָחֲקָה מֶנִּי
'ăṣaṯ rəšā'îm rāḥăqāh mennî
the_plans wicked be_repugnant.QATAL.3SG.F to_me
'The plans of the wicked are repugnant to me'. (Job 21.16)

It shall be noted that the stative present *qatal* interact with the same roots employed in the dynamic present, viz. the *yiqtol* formation. [33] While the *qatal* derived from adjectival roots has a clear static qualitative value, the same roots in the *yiqtol* provide a fientive meaning (Joüon 1923: 301). For instance, the *qatal* form of the root **לבש** (LBŠ) means 'he (is) dressed in something, he wears something'. The same root in the dynamic present *yiqtol* denotes an action of dressing oneself, i.e. performing a concrete activity (Joüon 1923: 301). In a similar manner, the *qatal* **הָיָה** *hāyāh* has a stative meaning 'is' while its dynamic *yiqtol* counterpart expresses an action of happening, becoming, coming into a real shape (Joüon 1923: 201).

Finally, some verbs are predominantly employed in the *qatal* with the force of a simple present. Even though semantically not distant from the previously mentioned stative function, these meanings indicate genuine activities performed by the subject, rather than denote inactive states or qualities. Put differently, they do not convey a straightforward concept of a state which is understood as a temporary or permanent quality and property (4). In particular, the idea of a present act of knowing or remembering is normally conveyed by the *qatal* form of the verb and not by the dynamic present *yiqtol*. Thus, the verbs in the examples quoted below do not enter into an aspectual contrast with the fientive *yiqtol* – the present activities of knowing, remembering, loving and hating are consistently expressed by the *qatal* forms.

(4) a. **יָדַעְתִּי** וַיֹּאמֶר יְהוָה אֶל־קַיִן אַי הֶבֶל אָחִיךָ וַיֹּאמֶר לֹא

wayyōmer ’ăḏōnāy ’el-qayin ’ēy heḇel ’āḥîḵā wayyōmer
said lord to_Cain where Abel brother_your and-he-said

lō’ yāḏa‘tî
not know.QATAL.1SG

‘Then the Lord said to Cain: Where is your brother Abel? He said: I do not know’. (Gen 4.9)

b. **זָכַרְנוּ** אֶת־הַדָּגָה אֲשֶׁר־נֹאכַל בְּמִצְרַיִם חִנָּם

zāḵarnû ’eṯ-haddāḡāh ’ăšer-nō’ḵal bəmiṣrayim ḥinnām
remember.QATAL.1PL the_fish which we_used_to_eat in_Egypt

‘We remember the fish we used to eat in Egypt for nothing’. (Num 11.5)

c. וְאֶעֱשֶׂה אֹתָם מַטְעַמִּים לְאָבִיךָ כַּאֲשֶׁר **אָהֵב**

wə’e‘ĕśeh ’ōṯām maṭ‘ammîm lə’āḇîḵā ka’ăšer ’āhēḇ
I_will_make them savory_meat to_your_father as like.QATAL.3SG.M

‘I may prepare from them savory food for your father, such as he likes’. (Gen 27.9)

d. רַק־**שְׂנֵאתַנִי** וְלֹא **אֲהַבְתָּנִי**

raq-śənē’ṯanî wəlō’ ’ăhaḇtānî
only_hate.qatal.2SG.M_ME and_not love.qatal.2SG.M_ME

‘You hate me; you do not really love me’. (Judg 14.16)

As a result – and *quod erat demonstandum* – we may affirm the following: the BH *qatal* being a prototypical resultative diachrony follows the three evolutionary scenarios within the resultative path, i.e. the anterior and evidential trajectories as well as the simultaneous cline. As far as the last type of the resultative progression is concerned, the meanings of the formation can be matched with the three main phases on the hypothesized functional path, i.e. with the stage where an original resultative gram functions as a simultaneous resultative, with the stage where it equals a stative (present), and with the stage where it approximates a present tense.

2.2 Inter-language dynamization

Turning our attention to the other type of the dynamization of typology, in this section we will demonstrate that one may match grams found in various languages with one of the above-posited developmental stages, jointly constituting the simultaneous path. It

is important to realize that, in some instances, we will simplify the real picture. We will treat some grammatical constructions as possessing one meaning corresponding to that evolutionary scenario. In such cases, the semantic load of a gram – viewed as a segment of the simultaneous cline – will reflect the most frequent use located on the simultaneous trajectory. On the other hand, we will note that these formations also possess values which reflect the anterior path.

2.2.1 First stage: Simultaneous resultative

An originally resultative construction whose most typical meaning corresponds to the initial stage of the simultaneous path is found in the Polish language. Polish has developed three formations employing three different forms of the old *n* / t (resultative, also called past or passive) participle, e.g. (*z*)*robiony* 'done': (a) the auxiliary verb *być* 'be' + perfective *n/t* participle, (b) the auxiliary verb *być* 'be' + imperfective *n/t* participle, and (c) old neuter *n/t* participle (ending in *o*) without any auxiliary verb (Maslov 1988: 77-80 and Migdalski 2006: 142-147). The second and third constructions evolved respectively into present (passive) and past tenses following the simultaneous (cf. § 2.2.3 below) or anterior trajectory. The first one (the *n* / *t* perfective participle in periphrastic locution with the auxiliary *być* 'be'), however, still preserves the initial simultaneous resultative sense (labeled also as a resultative statal, e.g. in Maslov 1988: 77-79).

With dynamic verbs such as *napisać* 'write', *zbudować* 'build' or *kupić* 'buy', the value of this construction may be defined in the following manner: the current state is viewed as resulting from a previously performed action (5a). A comparable bi-member meaning – including the plane of the prior action as well as that of the posterior effect – is provided by predicates which connote the idea of becoming or getting into a state *zmęczyć się* 'get tired' (5b), i.e. verbs which in resultative formations easily lend themselves to simultaneous inferences (see also (5c-d) *przeziębić się* 'get a cold, become sick' or *zaspać* 'sleep in, oversleep'; cf. Bybee et al. 1994). One could argue that in a similar vein to example (5a), sentence (5b) provides two pieces of information: first, the subject is currently in a state of being without strength and second, the state stems from a former action, viz. the fact of having gotten tired. However, in the discussed example – and with getting-into-a-state verbs in general – the simultaneous portion of the meaning, i.e. the emphasis on the ensuing state δ_2, seems to be significantly more evident. Consequently, inert simultaneous readings of the resultative formation appear as more natural. The propensity of such predicates to point to lasting conditions rather than to previ-

ous actions can be made evident by the use of adverbs with temporal durative value, such as *wciąż* or *nadal* 'still'. By uttering sentence (5c) below, a speaker highlights the current and continuous state of his or her (supposedly) child. In our example, having observed this present condition, the parent prohibits the child to go to school (cf. an analogous situation in (5d)). Quite the reverse, various dynamic predicates in the resultative expression (especially verbs that express irreversible situations), providing more anterior connotations and stressing the segment δ_1 (prior action) of the original resultative sequence, are not naturally disposed to be used with durative adverbs. The phrase *list jest wciąż napisany* 'The letter is still written' is semantically strange and incomplete. [34]

(5) a. List jest napisany.
letter is written.PTCP.SG.M
'The letter is written (= has been written)'. [35]

b. Nie mam sił. Jestem zmęczony.
not I_have strength I_am I_am tired.PTCP.**SG.M**
'I have no strength. I am tired'.

c. Nie pójdziesz dziś do szkoły! Nadal jesteś przeziębiony.
not you_will_go today to school! still you_are seized_by_cold.PTCP.SG.M
'You will not go to school! You are still sick (= you have a cold)'.

d. Ah poczekaj chwile, wciąż jestem zaspany.
ah wait moment still I_am slept_over(sleepy).PTCP.SG.M
'Ah, wait a moment, I am still sleepy (= heavy with sleep)'.

A similar phenomenon may be observed in another resultative construction built on the perfective *n/t* participle and the verb *mieć* 'have' which morphologically correspond to HAVE perfects of Germanic (English *I have done*) and Romance (Spanish *he hecho*) languages (6a-b). Examples (6a-b) clearly provide two pieces of information: one indicates that the subject does not have one hand and the other suggests that the hand has previously been cut off. In contrast, sentence (6c), emphasizes the condition of the leg, slightly margin-

alizing the relevance of the event which has produced that state. Consequently, it may be accompanied by durative adverbs.

(6) a. Mam obciętą rękę.
I_have cut.PTCP.SG.F hand
'I have a cut-off hand (i.e. someone has cut my hand)'.

b. Mam skopiowany ten CD-ik. [36]
I_have copied.PTCP.SG.M this compact-disc
'I have copied this CD'.

c. Mam (nadal) zdrętwiałą nogę.
I_have (still) stiffened.PTCP.SG.F leg
'I (still) have a stiffened leg (= my leg is still stiff)'.

The semantic difference between the two types of resultative grams (i.e. those which are derived from dynamic roots and those which are built on static or getting-into-a-state predicates) is, however, very subtle. In Polish, the perfective *n/t* participle employed in analytic expressions with the verbs *być* 'be' and *mieć* 'have' most frequently provide a prototypical bi-member resultative meaning linking the previous cause with the posterior result. The difference between dynamic and non-dynamic verbs in such constructions consist in the emphasis given either to the segment δ_1 (dynamic predicates stress the dynamic previous cause) or to the segment δ_2 (non-dynamic predicates highlight the static ensuing condition).

Another formation that functionally matches initial stages of the simultaneous (and in general, of the resultative) path is the Akkadian *parsaku*. The morphosyntactic structure of the construction derives from a periphrasis compounded by a verbal (resultative) adjective *parVs-* and, in the 1st and 2nd person of the singular and plural, personal pronouns (Kouwenberg 2010: 161-162, 176-181). The locution is thus genetically related to the above described BH *qatal*. [37] The main function of the *parsaku* is the description of the state that results from a prior action – thus, the gram is consistent with the universal definition of an original resultative expression as posited in § 1 above (see example (7a)). The temporal value is always secondary and depends uniquely on the context. The prototypical resultative bi-member value (prior dynamic action and posterior lasting effect) is evident with dynamic transitive (7b) and intransitive roots (7c):

(7) a. Inanna GIŠ.MA.NU nakis.
now manu_wood cut.PARSAKU.3SG.M
'Now the MA.NU wood has been cut / is cut'. (Loesov 2005: 133)

b. Agappāšu pe-ta-a.
wings_his open.PARSAKU.3PL.F
'His wings have been opened / are open'. (Rowton 1962: 265)

c. Awâtum ekallam kašdā.
news palace reach.PARSAKU.3PL.F
'The news has arrived / are available at the palace'. (Huehnergard 1987: 226)

As in the Polish examples, discussed previously, even though the resultative expression remains in initial phases of its development, one may already identify a slightly different treatment of dynamic and static roots. Although, in both cases, the *parsaku* principally expresses the condition of the subject resulting from a formerly performed activity, dynamic predicates such as *parāsum* 'cut off' and *šapākum* 'store up, heap up' to some extent emphasize the prior plane δ_1 of the resultative sequence (see examples (8a-b) where the *parsaku* forms can be interpreted dynamically as present perfects) while static roots such as *enēsum* 'be/become weak' or *lemēnum* 'be bad' seem to give more weight to the ensuing situation (8c-d). Thus, as noted by Kraus (1984) and Huehnergard (1987), the *parsaku* of the dynamic verbs provides more anterior (resultative perfect) meanings: the acquired condition always directly points to the action from which it has emerged. In contrast, static (qualitative or adjectival) and getting-into-a-state verbs stress results of prior activities, i.e. inert conditions that are simultaneous to the main reference time. Conversely, the event that has triggered a given state is only merely suggested.

(8) a. Anaku sa-an-qa-ku-ma alakam ul ele"i.
I be.busy.PARSAKU.1SG_and coming not I_can
'(As) I am busy, I cannot come'. (Rowton 1962: 275)

b. PN [38] ma-ru-uṣ-ma ul illikam.
PN be.sick.PARSAKU.3SG.M_and not came_here
'(As) PN is sick (= have become sick), he could not come'. (Rowton 1962: 273)

c. Anāku en-še-ku.
I be_weak.PARSAKU.1SG
'I am weak (= I have become weak)'. (Rowton 1962: 265)

d. Libba le-mu-un. (ZA 43 83: 2)
heart be_eveil.PARSAKU.3SG.M
'He is evil of heart'. (Rowton 1962: 265) [39]

A further illustration may be encountered in the Spanish language. Spanish possesses a resultative periphrasis built on the verb *estar* 'be' and a past (passive) participle which agrees in number and gender with the subject of the sentence, e.g., *está hecho* 'it is done'. The construction, being an archetypical resultative proper, provides a complex bi-member piece of information: the present state is a result of a previously performed action. The reference to the event triggering a current condition, and its importance, is evident when dynamic verbs are employed:

(9) a. La casa ya está construida.
the house already is built.PTCP.SG.F
'The house is constructed (= has been constructed)'.

b. Mira, el vaso está roto! ¿Quién lo ha hecho?
look the cup is broken.PTCP.SG.M who it has done
'Look, the cup is broken (= has been broken)! Who has done it?'.

However, when certain getting-into-a-state verbs (such as for instance, *cansarse* 'be(come) tired'), or predicates that express static situations or broadly understood non-dynamic activities (e.g., *dormir* 'sleep') are employed, the periphrasis emphasizes the resultant inert circumstance. In contrast, the action which has produced the state, is almost unrecoverable (10a-b). This is evident in (10b) where the construction indicates a durative present static activity – which corresponds to the motionless segment (δ_2) of the original resultative meaning – with no resultative taxis connotations at all (cf. a similar phenomenon in Polish, discussed above).

(10) a. Ah, estoy cansado, me duele todo el cuerpo.
ah I_am tired.PTCP.SG.M me hurts all the body
'Ah, I am tired, my whole body hurts'.

b. ¡No hables! aún está dormido en su cama.
not talk still is slept.PTCP.SG.M in his bed
'Do not talk! He is still sleeping in his bed'.

Probably, one of the most evident cases of a semantic "split" between dynamic and non-dynamic (or getting-into-a-state) roots that are employed in resultative proper formations can be found in the Mandinka idiom. Mandinka includes in its verbal repertory a resultative proper formation compounded of the non-verbal predicator *be* 'to be' and a participle in *-riŋ* (to this formation, given its shape, scholars refer to as '*be riŋ* gram'). Non-dynamic verbs (in particular, adjectival roots) as well as getting-into-a-state predicates typically express that a certain state results from a previously performed action. In such cases, both components of the semantics of the gram – i.e. a prior event (a dynamic activity) and a posterior result (a static quality or condition) – are equally relevant. Put differently, the semantic segment δ_1 is regularly present in the meaning conveyed by the *be riŋ* construction:

(11) a. A be katiriŋ.
it be be_broken.PTCP
'It is broken (because someone has broken it)'.

b. Motoo be tiñaariŋ.
car be be_spoiled.PTCP
'The car is spoiled (because someone has spoiled it)'.

On the contrary, when the *be riŋ* locution is derived from adjectival verbs, it invariably denotes qualities of the subject with almost no traces of any resultative connotation. These traits may be portrayed either as actual (i.e. restricted to or pertinent for the current state of affairs) or as persistent (thus, referring to the subject's general and constant characteristics or conditions; cf. Andrason 2013b). This means that when non-dynamic verbs are employed the segment δ_1 of the prototypical resultative proper meaning is missing.

(12) a. Saayiŋ m be jusudiyaariŋ [40] baake.
now I be be_happy.PTCP much
'I am happy very much now'.

b. N na suwo be koyiriŋ.
I of house be be_white.PTCP
'My house is white'.

c. Tubaabulu bee be jawuyaariŋ.
white_people all be be_wicked.PTCP
'All whites are wicked'.

2.2.2 Second stage: Stative (present)

The second – and, at the same time, intermediate – phase of the simultaneous path may be illustrated by a Hausa gram to which we will refer as the '*ya kashe* formation'. In the *ya kashe* expression, the first portion stands for a personal pronoun (in this case, 3rd person singular ya 'he') while the second part corresponds to a verbal root (*kashe* 'kill'). The formation has received various labels such as, for instance, indicative past (Abraham 1959), general past (Galadanci 1976), absolute past (Jungraithmayr & Munkaila 1985), perfect (Parsons 1960 and Wolff 1993), completive (Burquest 1992 and Newman 2000, see also accompli I in Gouffé 1963/66 and Caron 1991) and general perfective (Jaggar 2001 and 2006).

Generally speaking, the Hausa *ya kashe* construction provides values that correspond to the perfect and past portions of the anterior path; see examples (13a) and (13b), respectively. This means that the form expresses the idea of anteriority, being also able to locate an event in a definite past time (Jaggar 2006: 103-105). Thus, the *ya kashe* can be employed to indicate the occurrence of activities viewed as the consequence of some recent past events as well to denote simple past events. For instance, sentence (13c) may equate either a simple past 'she lost her key (e.g. yesterday)' or a resultative anterior (perfect) 'she has lost her key (i.e. the object is still missing)' "where the action has just been completed in the recent past and is relevant to the time of speaking" (Jaggar 2006: 111). In this latter sense, the construction assumes that the past situation is currently pertinent, being sometimes used with a present-time adverb such as *yanzunnan* 'just now'.

(13) a. Yaa kòoyi Hausa.
study.YAKASHE.3SG.M Hausa
'He (has) studied Hausa'. (Jaggar 2006: 103)

b. Yâaraa sun kaawoo àbinci.
children bring.YAKASHE.3PL food
'The children (have) brought the food'. (Jaggar 2006: 102)

c. Taa yar̃ daà makullintaà.
lose.YAKASHE.3SG.F key_her
'She (has) lost her key'. (Jaggar 2006: 111)

On the other hand, with determined verbs – in most cases with static predicates, with perception and cognition verbs and getting-into-a-state roots – the *ya kashe* formation is employed to denote a state, functioning as a prototypical (present) stative (cf. Jaggar 2006: 111):

(14) a. Naa yàr̃da. [41]
agree.YAKASHE.1SG
'I agree'.

b. Naa ƙòoshi.
be_full.YAKASHE.1SG
'I'm full (sated)'.

As expected, in the stative present function, the formation may interact with the dynamic present of the analogous root. For instance, while the grammatical construction *na ke kosha* expresses (progressive) present activities, portraying them as dynamic (cf. (15b): *ina son* 'I wish / I like [lit. I am wishing/liking i.e. in the process of wishing or liking'), the *ina kosha* form denotes a non-dynamic state or condition (cf. *ya son* 'I wish [lit. I am in a state of wanting or liking]' (15b):

(15) a. Ina son bachi domin idona yina chiwo. (Robinson 1937: 38)
like.PRS.1SG sleep for eye_my does pain
'I want to sleep for my eye is sore'. (Robinson 1937: 118)

b. Malam ya che yaro wanda ka kawo ba ya son
teacher says boy who you brought not like.YAKASHE.3SG.M
karatu ba. (Robinson 1937: 117)
read not
'The teacher says that the boy whom you brought does not like [lit. is not] reading'. (Robinson 1937: 26)

Another language which provides highly instructive evidence enabling us to recover the stative stage in the evolution of resultatives is Xhosa. The Xhosa verbal system includes a morphological pattern called a 'recent' or 'immediate past tense'. It consists in adding the suffix *-ile* to the verb, having previously removed the final *a* of the stem, e.g. *-vula* 'open' gives *-vulile* in the *ile* construction with the meaning 'has/have opened or opened'. In this usage, the *ile* form can indicate that a given event has (just, now, ever, sometimes) occurred as well as that it took place previously, today, yesterday or in the near past (Mncube 1930: 27). It thus approximates a prototypical anterior (perfect) and, at the same time, a non-advanced (i.e. recent) definite past tense (16).

(16) AmaNgesi avule isikolo.
People_English open.ILE school
'The English people (have) opened a school'.

Contrary to what we observe in the case of dynamic roots, static verbs – when employed in the immediate past *ile* – indicate a state rather than a complete action, and denote present situations rather than past ones (Mncube 1930: 33). Thus, static predicates – if they are employed in the same morphology that with dynamic verbs conveys perfect and recent past senses – denote situations that are taking place in the present. Such temporarily present activities introduced by static roots in the *ile* morphology are always portrayed as non-dynamic, i.e. as qualitative motionless situations, forming in that manner an opposition with dynamic present tense (Bryant 2007: 59). This means that they fulfill our definitions of statives: the causing event ceases to be recoverable, and the construction enters into a paradigmatic dichotomy with a dynamic present (cf. the contrast between (17a) and (17b), as well as between (17c) and (17d)).

(17) a. Ndiyalamba.
I.PRS.become_hungry
'I am becoming hungry'.

b. Ndilambile.
I.become_hungry.ILE
'I am (in the state of being) hungry'.

c. Ndiyaphila.
I.PRS.become_well
'I am becoming well'.

d. Ndiphilile.
I.become_well.ILE
'I am (in the state of being) well'.

Further evidence may be encountered in Mandinka. This idiom includes in its verbal repertoire a construction composed by a verbal root and the suffix *-ta*, e.g. *n taata* 'I have gone, I went' (from the verb *taa* 'to go'). The gram – which, given its morphological shape, has been referred to as the '*ta* form' – conveys various meanings corresponding to stages on the anterior path. Most commonly, with dynamic verbs it may be used as a present perfect (18a-c) and definite (either perfective or simple) past tense (18d) (cf. Andrason 2011d: 241-242):

(18) a. A funtita le. [42]
he leave.TA FOC
'He has left (= he is still absent)'.

b. A taata misiroo to.
he go.TA mosque_the to
'He has gone to the mosque (= he is still there)'.

c. Ite taata Gambia.
you go.TA Gambia
'Have you [ever] been to Gambia?'.

d. N naata Banjul kunuŋ.
I come.TA Banjul yesterday
'I came to Banjul yesterday'.

However, when the same construction employs static (qualitative or adjectival) verbs or predicates of perception and cognition, almost invariably, it introduces stative present situations or actual characteristics of the subjects. The reference to the prior action (which has triggered the present condition) is practically unrecoverable (Andrason 2011d: 236-240).

(19) a. N konkota.
I be_hungry.TA
'I am hungry'.

b. Ñiŋ bukoo beteyaata.
this book.def be_good.TA
'This book is good'.

c. Maanoo mankita jaŋ ne.
rice.DEF be_scarce.TA here FOC
'Rice is scarce here'.

d. A kuuranta le.
he be_sick.TA FOC
'He is sick'.

In significantly less frequent cases, the gram does not express qualities but rather indicates simple present activities approximating a simple present, a subsequent evolutionary stage on the simultaneous trajectory (ibid.: 238-239; cf. the next section, below):

(20) A lafita taa la Banjul.
he want.TA go to Banjul
'He wants to go to Banjul'.

2.2.3 Third stage – present tense

The third and ultimate phase of the simultaneous path, i.e. the stage where an initially resultative construction is employed as a present tense, is documented by a Polish expression. This construction consists of the auxiliary verb *być* 'be' and an imperfective *n/t* participle. The formation did not originally differ from a corresponding locution built on the perfective *n/t* participle providing, as the latter, resultative proper meaning (Maslov 1988: 78, see also the discussion on the use of the *n/t* perfective participle in § 2.2.1 above). However, in contrast to the expression that includes a perfective participle (which, as explained, provides prototypical resultative bi-member value), the periphrasis built on its imperfective counterpart developed the meaning of an actional (dynamic) present passive (21a). Accordingly, any resultative and stative connotations have been lost and nowadays the periphrasis equals a fientive present (Maslov 1988: 79). [43] As a non-stative category, the gram may be used as a progressive present passive (21b) and an iterative present passive (21c).

(21) a. Samochód jest kupowany.
car is bought.PTCP.IPFV.SG.M
'The car is being bought (i.e. someone is buying the car)'.

b. Dom jest właśnie budowany.
house is right_now built.PTCP.IPFV.SG.M
'The house is being built right now (i.e. someone is building or builds the house)'.

c. Te psy są karmione codziennie rano.
these dogs are given_food.PTCP.IPFV.PL everyday in_the_morning
'These dogs are given food every morning (i.e. someone feeds the dogs repeatedly)'.

The tense stage of an originally resultative formation may additionally be illustrated by two Akkadian verbs in the *iprus* construction. The *iprus* form is a prototypical resultative expression which developed along the anterior path (see Kienast 2000 and Andrason 2010a: 338-340 and 2011c: 176-177). This means that with almost all roots, the gram provides meanings which reflect advanced phases of the anterior track, especially those which cover the taxis (especially, in negative as well as in various temporal and other subordinated sentences) and tense (possibly also aspectual) segments (especially in main clauses; for detailed argumentation see Andrason 2010a). Thus, the *iprus* construction most commonly functions as a past tense or (in negative or interrogative phrases) present perfect.

On the other hand, the *iprus* of two verbs, viz. *edûm* 'know' and *išûm* 'have', does not provide any perfect, perfective or past meanings. Quite the reverse, although morphologically preterites, these two forms do not have any specific preterite value but rather correspond to a stative [44] (Huehnergard 2005: 282 and Andrason 2010a: 336). This means that the portion δ_1 of the original bi-member meaning has entirely been lost and thus the relevance of the previously performed action triggering the current state has become unavailable. However, given the fact that in the present or general time context, the two verbs do not appear in the dynamic present *iparras* – and hence they do not interact with any dynamic simple present – we may affirm that, more than a stative, they rather approximate a simple present. In fact, in discourse, the two constructions most frequently denote the present temporal sphere and function as a prototypical present tense: *īde* as 'he knows' and *īšu* 'he has' (Huehnergard 2005). Even more importantly, in the verbal paradigm of these verbs, the *iprus* gram

fills the gap of the non-existing *iparras* (dynamic present) forms – hence, it provides suppletive 'present' variants of the two roots.

(22) I-na-an-n ^{d}EN.SU(sic!)-mu-bali$_2$-[it] [š]i-pa-as$_2$-si-šu i-du-[u$_2$].
now Sîn-Muballit marking_its know.IPRUS.3SG.M
'And now, Sîn-Muballit knows its markings'. (Loesov 2004: 93)

Also Latin offers some instructive cases of the interaction between the anterior or past morphology and the present meaning. The Latin *Perfectum* in its main function approximates present perfect and definite past categories, e.g., *veni*, *vidi*, *vici* 'I came, saw, overcame' (Gildersleeve & Lodge 1895: 160). However, in some instances, the *Perfectum* form of a given verb is employed instead of the *Praesens* with a simple present value. This occurs, in particular, with predicates such as *memini* 'remember' (23a-b) or *odi* 'hate' (23c). In these cases, the *Perfectum* morphology (which, as mentioned above, normally introduces anterior, perfective or past actions) functions as a paradigmatic present tense (Zawadzki 2003: 94). That is to say, the verbs *memini* and *odi* lack *Infectum Presaens*. They fill this by using their *Perfectum* forms – successors of the Proto-Indo-European resultative constructions **me-mon-* and **h$_3$o-h$_3$d-* < **h$_3$e-h$_3$d* respectively (Meiser 1998: 210-211) – proving invariably a simple present meaning (Ernout & Thomas 1972: 223 and Pinkster 1995: 300). [45]

(23) a. Vivorum memini. (Cicero *De Finibus* 5, 3 in
living_ones.GEN remember.PERFECTUM.1SG Blánquez 1985: 954)
'I remember the living'.

b. Suam quisque homo rem (Plautus *Mercatore* 5, 4, 51 in
his.ACC Every man thing.ACC Blánquez 1985: 954)
meminit.
remember.PERFECTUM.3SG
'Each person thinks about his own concerns'.

c. Odisti hominum novorum (Cicero *In Verrem* 2, 4, 7)
hate.PERFECTUM.2SG men.GEN new.GEN
industriam.
industry.ACC
'You hate the industry of new men'.

Probably the most instructive case of a resultative construction which has reached the peak stage of the simultaneous path is provided by the Germanic strong (ablauting) preterite (Bybee et al. 1994: 77-78). The preterite-present verbs employ the simple past morphology in order to derive present meaning. For instance, the Icelandic verbs *kunna* 'know how to, can' or *vita* 'know something or someone', display structural characteristics of the preterite morphological pattern ('þátíð') such as a vowel fluctuation in the infinitive and in the inflected singular or plural forms (*kunna – kann – kunnum* and *vita – veit – vitum*) as well as a determined set of personal endings (1st and 3rd sg. ∅, 2nd sg. *(s)t*, 1st pl. *um*, and originally 2nd pl. *uð* and 3rd pl. *u*; cf. Birkmann 1987: 64-65, 225-226, 229). Compare, for instance, the past *hann vann* 'he worked' and *hann beið* 'he waited' with the present *hann kann* 'he knows how to, he can' and *hann veit* 'he knows' respectively. As widely recognized, the Germanic preterite-present verbs derive from the PIE resultative (labeled also 'perfect' or 'stative; Rix 1976: 240 and Birkmann 1987: 62-67). For instance, the present tense *veit* 'he knows' is related to the Greek perfect *οἶδα* with an analogous present meaning 'I know' (Pokorny 1959: 1125, Meid 1971: 19; Szemerényi 1980: 272-275, 310, and Birkmann 1987: 66-67, 224). Both formations are successors of the original PIE resultative **μoidh₂e* 'I have seen' (cf. Lat. *videre* with the meaning 'see', Birkmann 1987: 66-67).

From a semantic perspective, the preterite-present verbs in the ablauting past morphology seem to form a homogenous set. They describe a state of the subject or more properly its qualities such as "Wissen, Fähigkeit, Liebe, Mut, Angst, Bedürfnis, Pflicht" (Birkmann 1987: 87). Moreover, contrary to other predicates, the preterite-present verbs are reluctant in deriving progressive expressions, such as the Icelandic *vera að* 'be doing something' (cf. also English verbs *can*, *may* or *shall* which do not derive the progressve gram in *-ing*). This may suggest that preterite-present verbs could still be viewed as stative forms – a category that corresponds to the second stage on the simultaneous path. However, given that fact that there are no dynamic counterparts of the preterite-present verbs and that the meaning of previously quoted examples (e.g. *hann veit* or *hann kann*) is invariably present ('he knows' and 'he can', respectively), the preterite-present verbs are regularly classified as 'present tenses'. As in Akkadian and Latin, in the case of the preterite-present verbs, a regular past morphology enables speakers to derive suppletive present forms in the paradigm of certain (originally non-dynamic) verbs that lack a properly present morphology.

(24) a. Hann veit að foreldrar hans og bróðir
he know.PRETERITE-PRESENT.3SG that parents his and brother
eru dáin.
are dead
'He knows that his parents and brother are dead'.

b. Ég kann ekki að synda.
I know.PRETERITE-PRESENT.1SG not to swim
'I do not know how to swim'.

Furthermore, it should be noted that although preterite-present verbs generally conserve the preterite morphology (cf. the ablaut and various personal endings), they do show a slight adjustment to the "regular" present paradigm. This means that due to the process of analogy and leveling, the morphological shape of the preterite-presents has partially been modified in accordance with the dominant pattern displayed by "normal" simple presents. In particular, in comparison with the situation in Old Icelandic, the second and third plural endings, typical for the preterite (*uð* and *u*), have been substituted by their present homologues (*ið* and *a* [46] respectively), e.g. the Modern Icelandic forms *kunnið* 'you (pl.) can, know how to' and *vitið* 'you know', see Birkmann 1987: 225-228).

2.3 Review of other cases

The commonness of the relation between resultative, perfect or past morphologies, on the one hand, and simultaneous, stative or present meanings on the other cannot be overlooked. In addition to samples collected by Bybee et al. (1994) and to those discussed in detail above, one may encounter further cases of the said phenomenon in several members of the Niger-Congo, Turkic, Afro-Asiatic and Indo-European families.

The above-mentioned connection is commonly available in the Niger-Congo branch. For instance in Swahili, the ME-formation when used with dynamic verbs gives a dynamic present perfect meaning (e.g. *ni**me**kula* 'I have eaten' and *a**me**kuja* 'he has come'). Nevertheless, when derived from static roots, it invariably provides simultaneous present or present stative senses (e.g., *ni**me**choka* 'I am tired' and *a**me**sikia* 'he understands'; Wilson 1985: 66-67 and Ashton 1947: 37). In Zulu, the past tense is expressed by the addition of the morpheme *ile* (e.g., *ngimbon**ile*** 'I saw him' and *ngimbon**e*** [47] *izole* 'I

saw him yesterday'). With static verbs, however, the same morphological device is used to derive present stative sense (e.g., *silamb**ile*** 'we are hungry' or *ngom**ile*** 'I am thirsty'; Wilkes & Nkosi 2003: 119, 131). An analogical phenomenon can be observed in Southern Sotho. In order to derive present perfect forms, Southern Sotho employs suffixes, such as the ending *ile* and *tsē* (e.g., *kē rut**ile*** 'I have thought', *u lelek**ile*** 'you have chased away' and *kē kale**tsē*** 'I have emigrated'). [48] Quite the contrary, static predicates – when used in the identical construction – regularly convey simultaneous present or stative present values (e.g. *ō ru**ile*** 'he is rich, he possesses' and *kē lu**tsē*** 'I am seated / I am sitting', Paroz 1959: 39-40, 75-77). In Wolof, the so-called Accomplished Aspect construction when derived from dynamic action verbs denotes present perfect or past actions (e.g. *gis **naa** ko* 'I have seen / saw it'). With static verbs, however, the same gram expresses "exclamations in the present tense" (e.g., *xiif **naa**!* 'I am hungry' or *rafet **na*** 'She is pretty'; Henderson & Newsome 1992: 99, 105). Furthermore in Wolof, there is another formation that displays the prototypical dynamic-static split. Namely, the emphatic set of pronouns used with action roots introduces recent past events (e.g., ***yaa** lekka mbuuru* 'you ate bread'). In contrast, when static verbs appear with the same pronominal forms, the expression denotes stative present situations (e.g., ***yaa** xiif* 'you are hungry'; Henderson & Newsome 1992: 152). Mandinka provides another example of an exemplary breakup between dynamic and non-dynamic verbs. When dynamic verbs are employed in the so-called *ye* construction, they convey present perfect, perfective past and simple past senses (*nte **ye** motoo saŋ* 'I (have) bought a car or *ate **ye** kewo faa* 'he (has) killed a man'). However, if predicates of cognition, feeling and reception are used, the value of the same morphological pattern is typically stative or present (*nte **ye** i **kanu** le* 'I love you', *Ate **ka** n **koŋ*** 'he hates me', ***Ŋa** musoo soto* 'I have a wife' and *ate **ye** wo loŋ* 'he knows that'; cf. Andrason (2012c).

Also the Turkic branch offers an interesting example. For instance, in Turkish, the *di*-construction (most frequently labeled *di*-Past) almost always indicates present perfect or definite past events and activities (e.g., *gel**di**m* 'I came' or *Türkiye'ye gitme**di**m*? 'I have not been to Turkey?'). Nevertheless in a few cases, when it is derived from non-dynamic verbs, the *di*-formation expresses present stative values (e.g., *anla**dı**m* 'I understand' or *bunu çok sev**di**m* 'I like this one a lot'; Menges 1968: 130 and Pollard & Pollard 1996: 79-80).

As for the Afro-Asiatic family, the connection between resultative, anterior, past forms and simultaneous, stative and present

meanings can be encountered in Egyptian and Semitic sub-groups. Classical Egyptian offers two very instructive examples of the above-mentioned phenomenon. The *sḏm.n.f* gram in most uses provides present perfect and past (perfective and simple) values (e.g., *m'.**n**.f* 'he has seen / he saw' or *sḏm.**n**.f* 'he has heared / he heard'). However, in some limited cases (e.g. verbs of cognition), the identical morphology expresses stative present meaning (e.g., *rḫ.**n**.f* 'he knows' and *sḫ'.**n**.f* 'he remembers'; Menu 1993: 150-151). The other Egyptian construction is the so-called pseudo-participle (labeled also 'stative' or 'old perfect'). In some instances – for examples in the 1st person singular in independent uses – when derived from dynamic verbs, it may introduce present perfect or even simple past actions (e.g., *rdi.**kwi** r pr* 'I was installed in a house', *ḫnt.**kwi** r ỉnt* 'I sailed southwards'). However the same "pseudo-participial" gram built on static adjectival roots regularly connotes stative situations (*špss.**kwi*** 'I am / was rich' and *ʿ.**kwi*** 'I am / was big'; Menu 1993: 142-144, cf. also Malaise & Winand 1999: 441-451). The use of the present perfect or past morphology to provide present (stative or simple) values is also widespread in the Semitic family. Beside the above-discussed Hebrew example (cf. the *qatal* form in § 2.1), such a phenomenon may be illustrated by the Ugaritic *qatala* (Kienast 2001: 311), the Aramaic *q^{e}tal* (Kienast 2001: 322), the Syriac *q^{e}al* (Kienast 2001: 323), the Classical Arabic *qatala* (Kienast 2001: 332 and Danecki 1994: 153), the Ge'ez *qatala* (Dillmann 1959: 167-169 and Kienast 2001: 302) and the Amharic *näggärä* (Leslau 1967: 64 and Cohen 1995: 165). All of these constructions are cognate grams, genetically related (by sharing a common origin) to the Biblical Hebrew *qatal*. Moreover, the Biblical Hebrew language provides another highly interesting case, viz. the *wayyiqtol* gram. This formation most commonly expresses definite past events in narration, being also able to introduce some advanced perfect meanings, e.g., וָאֶבֹא הַיּוֹם אֶל־הָעָיִן (wā'āḇō' hayôm 'el-hā'āyin) 'I came today to the spring' (Gen 24.42) or וַיַּעַשׂ אֱלֹהִים אֶת־הָרָקִיעַ וַיַּבְדֵּל בֵּין הַמַּיִם (wayya'aś 'ĕlōhîm 'eṯ-hārāqîaʿ wayyḇdēl bēyn hammayim) 'So God maid the dome and separated the waters' (Gen 1.7). However with certain static roots, the *wayyiqtol* indicates stative present and simple present activities: וַתֶּלֶא (wattēlē') 'you are impatient' (Job 4.5), מִי־זֹאת וַתִּירְאִי (mî-'at wattîr'î) 'What do you fear?' (Isa 51.12), וַיָּגֶל כְּבוֹדִי (wayyāgel kəḇôḏî) 'my soul rejoices' (Ps 16.9), וָאֵדָע (wā'ēḏaʿ) 'I know' (Isa 50.7), and וַתִּשְׂנָא רֶשַׁע (wattiśnā' rešaʿ) 'you **hate** wickedness' (Ps 45.8) (on the *wayyiqtol* and its definition in terms of the anterior and simultaneous paths, see Andrason 2011a).

In the Indo-European family, the link between the perfect form and present meaning may be illustrated by Classical Greek examples. Classical Post-Homeric Greek derives its Indicative Perfect by means of the reduplication, vowel fluctuation and the affix *-κα* (*ka*). Most frequently, the gram is used either as a present anterior (i.e. in various prototypical resultative and present perfect functions) or as a definite past, instead of the Aorist (e.g., ***λέλυκα*** 'I have loosened' from *λύω* 'I loosen, I am loosing'; cf. Crespo et al. 2003: 262-264). However, with certain atelic predicates, the same construction may introduce present actual and habitual situations (e.g., ***τέθνηκα*** 'I am dead' from *ἀποθνήσκο* 'I die, I am dying'). Moreover, a few verbs are encountered only or most frequently in the Indicative Present Perfect with an exclusive present meaning. That is to say, the Perfect form of such predicates functions as a paradigmatic present (cf. the same phenomenon in Akkadian or Latin presented above). The most common verbs are the following: ***δέδοικα*** 'I fear', ***οἶδα*** 'I know', ***εἴωθα*** 'I am accustomed to', ***ἔοικα*** 'I am like, I am likely to' and ***πέπυκα*** 'I am by nature' (Crespo et al. 2003: 262).

Finally, the dichotomy between dynamic and static roots (the former regularly follow the anterior path while the latter, in the same morphological shape, on various occasions develop along the simultaneous path) is commonly observed in verbal systems of pidgin and creole languages. Namely with a considerable frequency, simple unmarked verbal forms of non-static verbs are employed in such idioms to express perfect or past events. Static verbs, on the contrary, in their basic form commonly introduce stative present situations (Holm 1988: 150-151). For example, a default reading for dynamic verbs in Jamaican Creole is anterior and/or past: *Jan nyam di aki* 'John has eaten/ate the ackee' (Durrleman 2007: 149). However, a default interpretation for static predicates is non-past: *Jaimz* ***nuo*** *di sang* 'James knows the song' (ibid.: 149). Likewise, the use of explicit resultative-completive markers with dynamic verbs regularly generates anteriors and past grams. However, when the identical morphological device is applied to static roots, the "resultative-completive" morphemes tend to yield forms with present tense meaning (Holm 1988: 162-163): for instance, in Jamaican Creole *im don nyam i* 'S/he has eaten/ ate' (Durrleman 2007: 145) versus *im* ***don nuo*** *dat* 'S/he already knows that' (ibid.: 147).

3. Conclusions

3.1 Constructive result of the study

The aim of the present article was to determine a series of stages forming a gradual linear functional progression referred to as a 'simultaneous path', according to which original resultative expressions develop into present tenses.

We have begun our research with an analysis of semantic properties of resultative constructions showing that the original meaning is bi-member: it represents a current state which derives from a previously achieved activity. We have affirmed that during the grammatical evolution, one of the two plans is highlighted while the other gradually disappears. In particular, the emphasis on the first portion of the semantic load (anterior dynamic action δ_1) converts the initial locution into a past tense. It has been explained that such a transformation consists of a unidirectional sequence of multiple phases which "traverses" three main semantic domains: taxis (anterior values), aspect (perfective) and tense (past tense meanings). This means that, within the present time frame, resultatives develop into anteriors (present perfects) and then into perfective and/or simple past tenses progressively losing their current relevance character.

Afterwards, we have suggested that while the prominence of the plan δ_1 triggers the development along the anterior trajectory, the stress on the portion δ_2 should be responsible for generating a present sense of original resultative constructions. We hypothesized that if – identically to the anterior trajectory – this type of the resultative evolution (labeled as the 'simultaneous path') stems from highlighting one of the two portions of the original semantically bi-member sequence, its properties and organization are expected to be equivalent to the character and orderliness of the anterior track. In particular, the emphasis on the plan δ_2 of the original locution (i.e. on a resultant condition that is simultaneous to the main reference time) should generate an analogous advancement with the difference that, this time, the ultimate output is not a past but a present tense. Consequently, the gram is likely to traverse the three verbal domains in a similar order: within the present time frame, it should first develop into a taxis (simultaneous resultative), then into an aspect (stative present) and finally into a tense (simple present).

In order to corroborate the evolutionary scenario postulated theoretically, we have made use of a procedure referred to as 'dynamization of typology'. Employing this technique within a single language

(intra-language dynamization), we have demonstrated that meanings of the Biblical Hebrew verbal form *qatal* positively validate our hypothesis. Namely, values of the formation can be matched with the three phases on the hypothesized functional path, i.e. with a stage where an original resultative expression functions as a simultaneous resultative (taxis phase), with a stage where it equals a stative present (aspectual phase), and with a stage where it approximates a simple present tense (temporal phase).

Similarly applying the inter-language type of dynamization, we have demonstrated that semantic properties of typologically similar grams in different languages confirm the previously sketched sequence of the simultaneous trajectory. Our analysis concerned formations that were unmistakable successors of original resultative expressions and/or that, having developed along the anterior path (in particular, in case of dynamic roots), regularly provided senses of a present perfect, perfective aspect or past tense. Consistently with the methodology, semantic characteristics of such locutions have been interpreted as reflecting consecutive stages on the same evolutionary trajectory (viz. on the simultaneous path). To be precise, we noted that in some idioms, a determined gram corresponded to original phases of the development, being used with a simultaneous resultative force (see Polish periphrasis *być* 'be' + *n/t* perfective participle, the Akkadian *parsāku*, the Spanish locution *estar* + passive participle and the Mandinka gram *be riŋ*). In other linguistic systems, typologically related expressions equal an intermediate stage of the progression, providing a stative meaning (cf. the *ya kasha* expression in Hausa, the *-ile* morphology in Xhosa and the *-ta* gram in Mandinka). In yet further tongues, certain constructions match the most advanced portion of the evolution, approximating a simple present tense (see, the Polish expression *być* 'be' + *n/t* imperfective participle, the *iprus* of two verbs in Akkadian, the *Perfectum* of some predicates in Latin, and most typically the preterite-present verbs in the Germanic family). Finally, we have mentioned several other cases where resultative, perfect or past morphologies employed with static verbs (or verbs which naturally yield static inferences) regularly generate simultaneous, stative or simple present values. Consequently, the synchronic typological evidence has positively validated our hypothesis: it shows that meanings provided by grams which derive from originally resultative expressions or that providing perfect, perfective or past values must have developed along the anterior path, may be categorized into three main groups. These three semantic sets reflect the three previously posited phases of the simultaneous trajectory: simultaneous resultative (taxis), stative (aspect) and present (tense).

Our data suggest that the three stages of the simultaneous path are virtually compulsory because each one of them constitutes a necessary basis for a further meaning extension and, thus, for a subsequent stage. However, the stative phase – in the same manner as the perfective past stage – can be viewed as typically arising in systems where there is another present gram with which the post-resultative formation (i.e. a formation that derives from an original resultative proper construction) has been interacting. To be exact, the simultaneous resultative is a direct application of a resultative proper input gram to a certain type of verbs: the bi-member sequence (prior event / origin vs. posterior state / result) is destabilized due to the semantic properties of a given root and the propensity is then given to the second portion of the conveyed resultative information. This simultaneous resultative value, in turn, is a foundation of the use of post-resultative locutions as statives: when the semantic slot corresponding to the prior action and/or cause of a resultant state is lost, the construction is employed with a stative sense, expressing qualities and properties. As already explained, this stage seems to be grammaticalized in idioms that include in their verbal inventory another present gram (e.g. present tense) in company of which a post-resultative entity has been evolving. The interaction with this simple present would thus deliver a properly present stative category. Finally, if this "accompanying" present formation is lost (or reanalyzed and recycled for different grammatical purposes, e.g. a future tense) or if there was no "accompanying" present category at all, the stative present or the simultaneous resultative present senses, respectively, could be expanded to a simple present value.

The evidence also shows that the transformation of some resultative formations into simultaneous resultatives, statives and presents cannot be regarded as a case of lexicalization. Lexicalization is an abrupt, from the evolutionary perspective, unpredictable, idiosyncratic and, most importantly, de-grammaticalizing phenomenon (Heine 2003: 166-167, 172-174). Quite the reverse, the conversion of resultative inputs into present tenses seems to be a gradual unidirectional process consisting of, at least, three consecutive phases. Furthermore, it displays an identical direction and order as the anterior cline, i.e. from expressions of taxis to tenses through aspects. It is also – to an extent – a foreseeable phenomenon. Hence, accordingly with grammaticalization processes – and in contrast with de-grammaticalization phenomena (such as lexicalization) – it "constitutes a significant constraint on possible language change" (Heine 2003: 174). Namely, it typically affects static predicates or roots that easily trigger static

inferences (e.g. verbs of cognition, perception or reception as well as getting-into-a-state predicates). Finally, it appears as a widespread – and, in some instances, quite a regular – change. It is not restricted to a few idioms and a handful of isolated examples, but on the contrary, may be found in a wide amount of languages, affecting in some cases a great number of grammatical entities (observe that in some tongues the trajectory conducts to the formation of a solid stative verbal category or a particular sub-type of a present tense).

Moreover, the simultaneous path in the shape posited in this paper enable us to systematically combine non-perfect and non-past senses (i.e. stative and present ones) with values that mirror stages on the main evolutionary scenario controlling the development of resultative morphologies, viz. the anterior path. In this manner, we can harmonize the "toward present" and "toward past" sets of meanings displayed by a given gram at any moment of its grammatical life. Both groups of values reflect unidirectional and universal processes controlling the semantic growth of resultative inputs. Both correspond to the same type of an evolutionary route linking the domains of taxis, aspect and tense. Consequently when describing a gram whose main uses match a portion of the anterior trajectory (perfect, perfective and/or past stages), the cases where the same formation provides values related to the simultaneous cline (simultaneous resultative, present stative and simple present) cease to be rare or exceptional. Quite the reverse, such meanings become fully compatible with the main semantic content of the formation given that both sets of values are regular manifestations of two evolutionary scenarios a resultative input can undergo. [49]

Finally, our study shows that there is a substantial difference between the simultaneous cline and the two other evolutionary tracks within the resultative path. While all predicates (either dynamic or static) may follow the anterior and (in case this development takes place) evidential trajectories, it seems that only non-dynamic predicates (static and adjectival verbs, as well as verbs that favor static inferences) follow the simultaneous track. Even more importantly, while the anterior and evidential paths can convert a category as a whole into a perfect or past (admitting all possible verbs and/or roots), the simultaneous cline is virtually restricted to a sub-class of non-dynamic predicates and never delivers a category in which all verbs could participate. In other words, the anterior and evidential clines concern the entire category while the simultaneous cline affects only a group of verbs. The only possible exception may be the Polish imperfective present passive, which traces its roots to a resultative forma-

tion and also tolerates all verbs, although only in their imperfective varieties (cf. § 2.2.3). Certainly, further research must be undertaken in order to definitively answer the question whether the simultaneous path may lead to a formation of genuine categories that would allow all verbs.

This dissimilarity in the extent of the anterior cline and simultaneous path likewise suggests that the former cline could constitute a "strong" or "governing" evolutionary law while the latter would correspond to a "weak" or "subdued" developmental principle. In this manner, the anterior path could influence the simultaneous track by hindering it so that, in the end, even non-dynamic predicates would follow the anterior cline. Again, additional studies are required in order to reveal the nature of the interaction between these two evolutionary drifts.

3.2 Limitations of the model and plan of future research

The deductive hypothesis and empirical evidence have enabled us to posit a three-segmental unidirectional and universal progression whereby some resultative inputs develop first into simultaneous resultatives, next into statives (present statives) and finally into present tenses. The universality of the simultaneous path, however, does not imply that the process necessarily occurs in all languages. The simultaneous trajectory – in the same manner as the evidential cline or even the anterior path – is an evolutionary possibility, [50] clearly available at the beginning of the development of resultatives but not indispensable to be accomplished. It seems natural that in resultative proper locutions dynamic roots favor the reading where the portion δ_1 of the bi-member meaning (cause, i.e. prior event) is either fully preserved or emphasized (this leads to the development along the anterior trajectory). In analogous formations, static predicates apparently in a regular manner stress the segment δ_2: the result, i.e. a simultaneous state. Nevertheless, the question whether and with which intensity a certain resultative construction will follow the simultaneous path (as is the case with the evidential cline) is a different issue and seems to depend on initial conditions and the specific organization of a given linguistic system. Such a relation must be studied meticulously.

It should be emphasized that the standard path model – as posited by Bybee et al. (1994) and as developed here – cannot predict the necessity of semantic trajectories, because it fails to depict real evolutionary cases: paradoxally, it does not show how a given gram develops in a concrete language. This stems from the fact that traditional

clines do not portray the state of a grammatical construction which consists of meanings corresponding to several segments of a track. It shall be noted that a category can even span along the entire path (cf. the *passé composé* in French whose senses cover the whole anterior cline from the resultative proper sense to the value of a remote past tense). On the contrary, the classical path's model presents the development as a stage-to-stage progression. It does so, because it uniquely formulates universal laws in respect to the order of the incorporation of new semantic properties which may take place during the grammatical life of certain constructions. It codifies the sequence of gradually acquired values. It says nothing about their amalgamation. Thus, the exact shape of concrete evolutionary cases is beyond the predictive power of the "path theory" (on the inadequacy of the classical path model for the description of real evolutionary cases, see Andrason 2012b). What is universal or "deterministic" in posited trajectories is not their worldwide inevitability (see that since a single input may evolve into various outputs such a claim is unsustainable within the traditional framework) but the predictability of the order of stages which occur along a given cline (i.e., the development along a path includes a determined series of consecutive phases). Likewise, the simultaneous path is universal not because such a trajectory is fully realized by every resultative construction in all languages, but – and exclusively – because if it happens, its orderliness is as claimed above. Put differently, if a resultative expression is converted into a simple present it is so, by following a certain strictly prearranged order. This order (simultaneous resultative > stative present > simple present) is universal.

However, the universal orderliness of the evolutionary rule – in our case, of the simultaneous path – must also be taken with caution. Semantic paths are unrealistic rules, deterministic abstractions, or theoretical approximations. They are built applying the inductive and abductive types of argumentation: given certain empirical facts we construct a law which seems to explain the reality in the best manner. In particular, it elucidates the acquisition of new values and a heterogeneous semantic potential of grams. Such an inductive source of all paths is however far from being ultimately exhaustive. Evolutionary principles are inferred from and confirmed by a limited set of linguistic experience – they reflect a small percentage of languages available nowadays in the world. Thus far, it seems that languages do not violate these rules-paths. However, there is no scientific formula which would prohibit them from doing so. This stems from the fact that our developmental laws are purely inductive with no deductive founda-

tion. There is nothing *a priori* which would imperatively ban a transformation of pasts into perfects or presents into statives. At least, we have not discovered such a cognitive, physical or biological constraint yet. Consequently, it is possible – though rather unlikely – that further research may encounter progressions which would infringe posited paths: we simply do not know how the remaining (and in fact, infinite) portion of reality will behave.

Moreover, this approximate universality of trajectories may be illustrated by the fact whereby the completion of an entire evolutionary cycle is not compulsory. Quite the opposite, grams are not compelled to go through all of the stages of a path, i.e. to the absolute end of the cline. On the contrary, they may disappear before reaching the ultimate segment (this happened in the Pidgin Icelandic[51] where the present perfect was lost before being transformed into a past, cf. Andrason 2008).

Finally, since the language is a social instrument related to humans and their activities, one can easily suppose a situation where users arbitrarily decide to disobey a given path, for instance, starting to employ a past as a perfect. Yet again, this scenario, even though highly unlikely, is not impossible. To conclude: until we have not discovered a deductive – theory based – meta-law, all paths will appear as purely inductive generalizations: they must thus be taken as probabilistic universals. We call them 'laws' being nevertheless conscious that we mean 'statistical approximations'.

The issue of the universality and determinism of the paths is highly complex and should be treated from a wider perspective. Since the time of methodological revolutions of thermodynamics, quantum physics and Gödel's theorem, scientists have been recognizing that determinism is limited to artificial laws while natural phenomena, due to their complexity and to the incompleteness of any axiomatic theory, are to some extent governed by randomness. This means that even though we propose universal laws (which are supported by empirical data and furthermore corroborated by a theoretical argumentation) the application of such deterministic rules to real systems will not necessarily produce unique solutions (Wagensberg 2007: 12, 27, 56-57, 60-62). Paths are such artificial dynamic equations: resultative path codifies an ordered series according to which resultative inputs incorporate new meanings. This rule may be further developed into a statistical law whereby a given percentage *P* of constructions or verbs evolves along the anterior track, while the remaining part (percentage *R*) develops in accordance with the simultaneous track. The two principles may be additionally improved relating them to certain

fixed variables, e.g., some initial conditions. We could thus propose a following law: given properties $a_1 \ldots a_n$ of a system S, the evolution in terms of the anterior or simultaneous clines amounts to a certain percentage P (in the ideal case, this percentage would reach 100% and thus the probability 1). This is what would make the anterior and simultaneous paths significantly more adequate and more predictive. From a practical perspective, this is what we must do if we aspire to provide a "perfect" model of a semantic growth of resultative expressions – and hence this is a proposed improvement of the description presented in this paper. However, since the probability that equals 1 – due to the impossibility of a total determination of a system and in harmony with Gödel's theorem of incompleteness (Wagensberg 2007: 27, 60) – is always an idealization, this future "perfect" law when applied to real cases will in certain points lose its deterministic power, driving the universe of possible evolutions into chaos. The determinism and universality of laws – improved and enriched as much as it is possible – will persistently collapse in certain moments when applied to realistic cases.

Finally, other – more specific – issues must be addressed in future research. First, similarly to the anterior path, each of the three main evolutionary segments of the simultaneous trajectory is likely to consist of several more microscopic phases – thus, the posited path may be more detailed.[52] Second, in accordance with the increase in the temporal distance and widening of the temporal parenthesis within which a past event occurred, prototypical to grams developing along the anterior path (cf. the development from an immediate past to a general and remote past), the simultaneous track is supposed to display an inverse tendency. Namely, it should progressively provide more general present values. In other words, the gram is expected to evolve from actual meaning (currently acquired state) to more persistent significance (first durative and then general simple present). The exact nature of this change must be investigated. And third, given that the corroboration of our hypothesis was built on the synchronic evidence (in particular on dynamization of typology), it is necessary to provide direct diachronic proofs. Hence, a concrete historical progress must be encountered during which a resultative became a present tense traversing the three phases in the above established order.

These three points – together with the above mentioned statistical delimitation of the simultaneous path and its connection to certain initial conditions – inevitably constitute a future research program of the author.

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Notes

[1] This means that the meaning of an acquired state (deriving from a previously performed action) is persistent at and simultaneous with the reference time established by the context. Thus, resultative constructions when shaped and employed with the present temporal reference (as in the above quoted English examples) equal a resultative present (Bybee et al. 1994: 54, 63; Heine & Kuteva 2006: 151). Likewise in the past and future time frames, the category functions as a resultative past and resultative future, respectively.

[2] Consequently, the paper copies the following direction of argumentation: the current state of knowledge entails a theoretic hypothesis (hypothetico-deductive step) which is next verified by the analysis of evidence (empirical step). Thus, I first propose a hypothesis and deduce predictions of what I should observe. Then I compare observations against the predictions and judge the soundness of the hypothesis. One could object that the article should be organized differently, i.e. commencing with the presentation of arguments and data suggesting a certain order of the path. Only at the end, the author would refer to general theoretical issues and explain how this model fits into these. The reasoning movement would thus be as follows: empirical facts trigger a model (inductive step) which is subsequently related to the already-existing theories. I have preferred the former strategy due to the following: the treatment of evidence and its categorization into gram-types each time requires an in-advanced-chosen model, i.e. the data is classified and grams equaled with presupposed categories. Since any arrangement of evidence necessitates a previously adopted set of categories (according to which the data will be processed), instead of selecting such categories in an arbitrary or chaotic manner, I find it more logical to opt for classes which show a deductive foundation and are directly related to the posited model. After that, evidence is sorted in accordance to these theoretically inferred categories and the hypothesis confirmed or rejected. The method chosen here is not infrequent in the scientific enterprise. It was, for instance, employed by Charles Darwin in his The origin of species (1872), see Futuyma (1998:30).

[3] I have already discussed the resultative path and, in particular, its anterior sub-trajectory in various articles (see, for instance, Andrason 2010a, 2010d, 2011a, 2011b and 2012a). Therefore, some portions of this section – without being reproduced word by word – may, to some extent, coincide with parts of other papers.

[4] As its Greek root suggests, the term 'taxis' indicates the "temporal" *order* of an event and makes reference to the concepts of anteriority, simultaneity and posteriority (Maslov 1988). Accordingly, taxis grams – such as perfects – portray events as being internally bi-dimensional, consisting of two temporal/logical spheres of reference: that of anteriority (pointing out what is behind a given reference point) and that of simultaneity (i.e. the suggesting of what is simultaneous to the reference point). Furthermore, as already explained, the internal event order may also be viewed as being formed by two temporal/logical slots: the precedence (anterior event) and the consequence (posterior result).

[5] This rule, however, does not imply that all tenses derive from aspects. It states that tense-stages are located after taxis-phases on the developmental cline and

that, when derived, aspect-segments occupy an intermediate evolutionary position (i.e., between stages of taxis and aspect).

[6] The development is also denominated 'aoristic path' (Squartini & Bertinetto 2000: 404) or 'perfective path' (Drinka 1998: 128).

[7] The inclusive (labeled also 'universal') anterior indicates that an action or state holds without interruption from a determined point in the past to the present moment, e.g., *I have known Max since 1960* (Jónsson 1992: 129–145).

[8] The resultative anterior introduces dynamic events portraying them as highly relevant for the present state of affairs, e.g., *I cannot come to your party – I have caught the flu* (McCawley 1971).

[9] The frequentative anterior expresses iterative resultative activities, as in the following Portuguese example: *Ultimamente o João tem lido muitos romances* 'Recently John has read many novels' (Squartini & Bertinetto 2000: 409). Although the formations that are prototypical frequentative perfects seem to be less widespread cross-linguistically (giving the impression of a possible "optionality" of the frequentative stage on the anterior cline), the value of a frequentative perfect may be detected in the meaning potential of perfects in various languages (e.g. in the Hebrew *qatal* form or in the Spanish *he hecho* perfect; cf. Andrason 2011c).

[10] The experiential anterior indicates that the subject has an experience of having performed (or not) a given action. This means that the activity is portrayed as an experience which occurred at least once, and which might have been repeatable, e.g. *I have never read that book* or *I have read 'Principia Mathematica' five times* (Jónsson 1992: 129-145).

[11] In this function "the situation referred to stops before the moment of speaking" (Depraetere & Reed 2000: 97).

[12] As in the Spanish *Present Perfecto*: *Esta mañana me he comprado un coche nuevo* 'This morning, I bought (lit. have bought) a new car'.

[13] This stage of the development may be illustrated by the 16th and 17th century *Passé Composé* in French (Brunot & Bruneau 1933: 50). See also Alicante Spanish in Schwenter (1994).

[14] The indefinite perfect (labeled also indefinite past) is placed in between the present and past time spheres: it indicates clearly past events, without however specifying its temporal location. As for the former property, the gram approximates a past tense. However, given the latter characteristic, the formation behaves as a typical present perfect.

[15] The vertical arrows in this figure symbolize the diachronic progression of resultative inputs. The stage representing the indefinite perfect or indefinite past has been located in the middle of the present and past temporal spheres due to its linking and intermediate character. Note also that as a definite past, the gram may undergo two, to some extent, independent types of evolution. The transformation of the anterior into a perfective past and later into a simple past is facultative: it occurs in determined types of verbal systems, especially in languages that already possess an imperfective past tense (cf. Bybee et al. 1994: 81-87). The acquisition and loss of the aspectual marking (if it takes place) is a phenomenon that is concurrent with the increase of the temporal distance. More importantly, there is no precise stage-to-stage equivalence between the stages which link the indefinite past and various subcategories of the definite past on the one hand, and the development of the perfective past into its aspectually neutral variant.

Finally, it shall be noted that although the order of different stages of the anterior path is strictly determined, the necessity and degree of developing all of the available senses-stages is significantly less deterministic and depends on the idiosyncrasy of a particular linguistic system. This stems from the fact that languages

(being prototypical complex systems), although they are governed by deterministic principles (such as the order of stages on the anterior path), inevitably render chaotic and, hence, partially unpredictable solutions due to an infinite amount of components and relations.

[16] An example of the evolution of a pluperfect into a remote past can be encountered in Old Polish. In Old Polish, the taxis (pluperfect) value of the expression *zrobił jeś był* lit. 'You had done' had been lost in some contexts, and the formation indicated simple remote events and situations (Długosz-Kurczabowa & Dubisz 2003: 309). The Polish language also provides an instructive case illustrating the anterior path in the future time frame. In Polish, the nowadays analytic simple future (*będzie pisał* 'He will write') derives from a future anterior (future perfect) expression. The original taxis connotations have been lost and the construction denotes simple future activities (Długosz-Kurczabowa & Dubisz 2003: 310).

[17] This means that present resultatives, which develop into present anteriors and definite past tenses, persist for a significantly longer time than analogous formations employed within past and future time frames. This phenomenon may be encountered in Afrikaans where the old present anterior *ek het geskryf* 'I have written' can nowadays be used as a definite past of any remoteness with the meaning of 'I wrote'. On the other hand, the old past anterior (still employed in Dutch *ik had geschreven* 'I had written') has been lost (Donaldson 1993: 231-234). Cf. a similar development and thus loss of the pluperfects in Yiddish (*hatn gjtragn*, Prince 201: 279-80), Polish (*zrobił jeś był*, cf. the previous note) or Spanish (*hubo hecho*).

[18] The inferential tone provided by resultatives and anteriors may be found in North-Germanic languages, such as Swedish and Icelandic, where the 'have' perfect (a descendent of an original possessive resultative locution) can nowadays be employed with inferential meaning, approximating the category of a *guessing* perfect (Haugen 1972, Jónsson 1992 and Lindstedt 2000).

[19] This stage may be documented by, for instance, the Persian 'distanced past' (Lazard 1985).

[20] This phase may be exemplified by the Turkish evidential gram, the so-called *miş*-perfect (a construction which expresses both inferential, non-first hand and referential values, Johanson 2003) and by the Macedonian perfect in *l* (Lindstedt 2000).

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

[22] In order to avoid the confusion of the stative understood as an aspectual category (a portion on the resultative path), we will employ the term 'static verbs' (instead of the label 'stative') when referring to non-dynamic predicates. Static verbs usually include adjectival or quality verbs, verbs representing mental and sensory perception, emotions, attitudes, stance and relationship, as well as measurement (Tagliamonte & Poplack 1993: 178).

[23] Cf. the verb *οἶδα* 'I know (lit. I have seen)' from the PIE anterior (perfect) of the root **u̯oid-* / *u̯id-* 'see' (see Maslov 1988: 71; Bybee et al. 1994: 76 and Drinka 2003: 106-107). Here also belong *ē* verbs in the Indo-European family: Latin *sedeo* 'I am sitting' from 'I have seated', *habeo* 'I have' 'I have gotten', Germanic *hafe* 'I have' from 'I have gotten', Slavic *ě* verbs such as *bolěti* 'hurt, ache' or *višěti* 'hang, be hanging' (Maslov 1988: 71), and preterite-present verbs of Germanic languages, e.g. Gothic *wait* 'I know' from PIE 'I have seen' (Cowgill 1975: 569 and Drinka 2003: 107, in respect to preterite-present verbs see a more detailed discussion in § 2.2.3, below).

[24] As the perfective developed along the anterior track (originally located itself in a present time frame) equals a perfective past, the stative of the simultaneous

cline (likewise, located in a present temporal sphere) is expected to equate a present stative.

[25] All verbs that appear in pertinent resultative, anterior or past constructions will be given in bold type.

[26] This means that usually the admissibility in progressive expressions is considered a type of a test for detecting static verbs and stative categories (Hacert 2004: 161). In fact, both stative constructions and static roots may be seen as one dimension of a verb's grammatical (external) or lexical (inherent) aspect, respectively (this lexical aspect is often referred to as 'Aktionsart'; cf. Hackert 2004: 161).

[27] It shall again be emphasized that a stative category or a stative value may not be equalled with static predicates. The confusion between the two concepts stems from the fact that static verbs are sometimes also labelled 'statives'. "Staticity" (i.e. a property displayed by static verbs or roots) is an Aktionsart category and depends on the semantics of a specific verb or root. Stativity, on the contrary, is a specific value that a verb receives in a determined formation, especially in prototypical stative category (i.e. in grammatical constructions that prototypically express stative value). It should be noted that (although most statives in our review are derived from static verbs), a stative category/sense may be formed from non-static predicates such as verbs with the meaning of getting or seeing, cf. *I have got* (= I have) in English or *ég veit* 'I know' in Icelandic that derives from the PIE anterior 'I have seen'; cf. note 23, above). One should also note that although stativity is not an equivalent to the imperfective aspect, it does, however – in an analogical manner as semantic domains of progressivity, habituality, iterativity and durativity – constitute a sub-type of a broadly understood concept of imperfectivity.

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

[29] This means that the similitude of and relation among these grams is principally typological and not essentially genetic (although they may also be genetically connected).

[30] The distinction between the intra- and inter-linguistic types may seem superfluous since the two kinds employ exactly the same principle: they interpret synchronic states as manifestations of diachronic stages (cf. next paragraph). The distinction between them rather consists in the precision of the description of a given state. While inter-linguistic analysis usually deals with dominant (or the most prototypical) meaning of a gram, the intra-linguistic one examines a gram's entire polysemy, irrespectively of the fact whether a given sense is common or, on the contrary, rare. In that manner, thanks to the inter-linguistic type, we can locate grammatical constructions – that are typologically similar but belong to different languages – on different points of the same universal path. They represent distinct stages of an exemplary semantic advancement. However, by using the intra-linguistic type, we can arrange senses offered by a single form and represent them as phases of a given typologically universal cline (cf. below in this section).

[31] The languages which provide supporting evidence have not been chosen accidentally. They simply reflect the analytic capacity of the author. Thus, grams whose morphology corresponds to a dynamic anterior, perfective or past morphologies but whose meaning is that of simultaneous, stative or present domains are taken from idioms of which the author has native, fluent or – in a few cases (Southern Sotho and Zulu) – intermediate reading skills. This means that he not only fully understands semantic nuances of all the below-discussed examples but also – and most importantly – comprehends the place of the analyzed constructions in the verbal systems to which they belong. As a result, we avoid quoting data and referring to languages in a superficial manner. This approach has, of course, its weak points of which the most relevant is the following: the scope of presented evidence is rather limited. Nevertheless, we are convinced that the

sample of 21 languages (both members of Indo-European, Afro-Asiatic, Altaic and Niger-Congo families as well as creolized tongues) and 30 verbal formations is sufficient to be regarded as typologically and scientifically valid.

[32] In order to avoid labels suggesting semantic values I will normally gloss the relevant grams referring to their morphological properties. Hence, the Hebrew construction is denominated 'qatal'. The same procedure will be employed to refer to formations in Akkadian (the *parsaku* form), Hausa (the *yakashe* form), Zulu (the *ile* form) and Mandinka (the *be riŋ* and *ta* forms) in §§ 2.2.1 and 2.2.2. The Akkadian expression in § 2.2.3 will be glossed in an identical manner as the *iprus* form. The Latin construction in § 2.2.3 will be glossed using its Latin name (*Perfectum*) without relating directly the label of the gram to its semantic content. Finally, when glossing the Icelandic formation in § 2.2.3, the term 'preterite-present' will be employed. In cases where resultative expressions are transparently periphrastic, we will decompose them glossing separately their parts (as in Polish formations in §§ 2.2.1 and 2.2.3 as well as in Spanish in § 2.2.1; also the *be riŋ* formation in Mandinka will be glossed as 'be' + 'participle'). Such a glossing method may seem to be idiosyncratic but it will, however, free the analysis from compromising – and always inadequate and simplifying – labels.

[33] On the polysemy of the *yiqtol* and its explanation, see Andrason (2010c).

[34] In order to make such a sentence acceptable one must construct a peculiar context. On the contrary, getting-into-a-state verbs do not necessitate any special circumstances to be employed with adverbs expressing duration or continuity because they naturally trigger inert stative reading parallel to the meaning included in the plane d_2 of a resultative proper. It shall be observed that the three static participles *zmęczony*, *przeziębiony* and *zaspany* are "felt" as a type of adjectives – this certainly stems from the sense of the underlying getting-into-a-state verbs.

[35] Certain dynamic predicates that denote reversible actions allow two interpretations. For instance, the sentence *Drzwi są zamknięte* 'the door is closed (lit. doors are closed)' may have two ways of reading. In the first, the formation [be + participle] functions as a dynamic resultative proper with a meaning similar to 'the door has been closed'. In this sense, the use of the adverb *wciąż* is impossible. However, the participle *zamknięte* may also be interpreted in a more adjectival manner as a transitory quality. In this case, one may employ the lexeme *wciąż*.

[36] This sentence (*Mam skopiowany ten CD-ik*, with the participial, pronominal and nominal objects employed in forms that are equivalent to the nominative) offers a more dynamic and perfect-like interpretation than an analogical possessive expression with the participle, pronoun and substantive in the accusative form that is different form the nominative (i.e. *mam skopiowan**ego** te**go** CD-ik**a***). This latter sentence denotes that the subject possesses a CD that has been copied (i.e. 'I have this copied CD'). Thus, the use of the adverb *wciąż* 'still' is strange in the former example, while it is perfectly possible in the latter.

[37] Of course, this does not mean that the Hebrew *qatal* derives from the Akkadian *parsāku* but only that the two constructions share their origin, having developed from a proto-Semitic periphrasis that was formed by a resultative participle (de-verbal adjective) and initially independent personal pronouns.

[38] PN is an abbreviation for 'proper name'.

[39] In instances where a concrete reading does not suggest any taxis connotations (observable in particular in example (8d) above), the *parsaku* might in fact illustrate the subsequence stage of the development, i.e. that of a proper stative. Such a reading is possible especially in light of the fact that static verbs also derive a fientive present *iparras* with a dynamic (for instance, ingressive) meaning.

[40] It shall be noted that these forms in *-riŋ* are not adjectives but genuine participles, derived from corresponding verbs *jusudiyaa* 'be happy', *koyi* 'be white' and

jawuyaa 'be bad'.

[41] Hausa examples follow the spelling conventions employed in the original texts from which the sentences have been extracted.

[42] The abbreviation FOC stands for a 'focal particle'.

[43] The present temporal reference derives of course from the auxiliary verb *być* 'be' employed in the present tense, i.e. *jest* 'is'.

[44] Huehnergard (2005: 282) equates the *edûm* and *išûm* verbs in the *iprus* form with a stative category because of the fact that the predicates are not restricted to the present tense but also occur in other time frames.

[45] Conversely, the *Perfectum* forms *memini* and *odi* never express present perfect or past events or situations. Perfect or past meanings of the two verbs are introduced by their pluperfect forms: *memineram* 'I remembered' and *odieram* 'I hated' respectively.

[46] The sole exceptions are the verbs *munu* 'may, must' and *skulu* 'shall, must' (Birkmann 1987: 226, 228).

[47] The vowel *e* is an abbreviated allomorph of the morpheme *ile*.

[48] In some cases, the Southern Sotho Perfect can also express the definite past.

[49] This explanatory potential of the simultaneous path (as a sub-type of the resultative track) has successfully been employed to elucidate the nature of the Akkadian *iprus* and the Biblical Hebrew *wayyiqtol* by the author of the present article (see Andrason 2010a, 2011a and 2011c).

[50] Observe that in the model presented by Bybee et al. (1994), the verbal evolution, even though unidirectional, is not uni-dimensional. Some paths may diverge (i.e., a trajectory may bifurcate, cf. the resultative path and it sub-track, the evidential path) and typologically identical inputs can develop following more than one evolutionary scenario (cf. various modal paths).

[51] *Pidgin Icelandic* is a linguistic construct which has been employed by the immigrant community in Iceland and which corresponds to what Mühlhäusler (1986: 62-63, 135-136) labels as a *pre-pidgin* (a kind of pidgin that constitutes an example of individual solutions to the problem of cross-linguistic communication). Icelandic Pidgin has its source in numerous immigrant versions of Standard Icelandic which are mutually intelligible and also socially equal. This pidgin arose when, searching for a linguistic consensus, speakers of different non-stabilized immigrant varieties of Icelandic developed a mutually intelligible version of Icelandic which they speak (Andrason 2008: 122-123).

[52] It should be noted that the partition of a linguistic reality (in this case, of the semantic potential of a gram or a collection of grams) reflects *our* human conceptualization. This means that such a partition – as scientifically justified and functional it would seem – is inevitably doomed to be, to a certain degree, artificial and extern to the real world. The grammatical reality is as follows: a gram appears in an infinite set of contexts providing thus an infinite spectrum of specific values. We assume that in the ultimate instance no two contexts – and thus no meanings – are identical. They must diverge at least in one aspect on a pragmatic or physical level. Two utterances will never be produced in exactly the same circumstances because life is a thermodynamic process where time is in focus (this means that two propositions will differ at least in their moment of being uttered; cf. Schneider & Sagan 2009: 185-204). Let us imagine two formulas F and G which define determined contexts and thus meanings. These formulas are represented by sets of data or variables $a_1 \ldots a_x$. These sets will necessarily deviate once a certain number of such elements $a_1 \ldots a_x$ has been introduced. In other words, we can always extend a formula F (a sequence of data $a_1 \ldots a_x$) to a number ($a_1 \ldots a_{x+a}$) where it will be distinct from a previously identical formula G. This fact is one of the properties

of complex systems, which are a type of dynamic structures to which linguistic organizations belong. Likewise, it results from Gödel's theorem of incompleteness (Wagensberg 2007: 27, 56-57, 60). The phenomenon described above corresponds to the impossibility of determining a total set of initial conditions in dynamic chaotic systems what makes, after a certain time, such systems unpredictable. The set – to be complete – would again have to be infinite. The realistic physical quantities are 'fuzzy-valued'. However, in all models, they are rendered by precise real numbers, being thus inevitably reduced to approximated quantities. This will limit the prediction of the behavior of certain dynamic systems, driving them into chaos (cf. Smith 1998: 115-177, 127). As scientists – and also as humans –, we cannot deal with reality viewed in such an atomic fashion, i.e. receiving it passively as it is. It is impossible (both conceptually and physically) to express the semantic potential of a gram presenting each time the entire set of its contextual values – this set would be infinite! Hence, we must simplify the real picture proposing a model which approximates the real world in the most suitable and practical manner. We divide it into artificial individuals, called 'concepts' (which, in the model of paths, corresponds to senses provided by grams). These concepts which segregate reality into separate "boxes" are *our* inventions – they do not belong to the analyzed universe. Therefore it is not impossible that more detailed partitions of the simultaneous trajectory may be proposed. It should virtually always be possible to split a given box-concept into further, more specific, boxes-concepts, obtaining more and more microscopic vision of a fragment of the world. There is no limit to such a progressive atomization except that in the end one reaches the ultimate stage where one context equals one meaning. As explained previously, this stage would be highly impractical.

Bibliographical References

Abraham Roy C. 1959. *The Language of the Hausa People*. London: University of London Press.

Abraham Werner 1998. The morphological and semantic classification of 'evidentials' and modal verbs in West Germanic: the perfect(ive) catalyst. *Groninger Arbeiten zur germanistischen Linguistik* 42. 192-206.

Aikhenvald Alexandra 2004. *Evidentiality*. Oxford: Oxford University Press.

Andersen David 2000. The Evolution of the Hebrew Verbal System. *Zeitschrift fur Althebraistik* 13. 1-66.

Andrason Alexander 2006. *Málfræðilegt horf í íslensku*. M.A. dissertation. University of Iceland, Reykjavik.

Andrason Alexander 2008. The *BÚNA* construction in Pidgin Icelandic. *Íslenskt mál* 30. 121-140.

Andrason Alexander 2010a. The Akkadian *Iprus* from the unidirectional perspective. *Journal of Semitic Studies* 55/2. 325-345

Andrason Alexander 2010b. The panchronic *yiqtol*. Functionally consistent and cognitively plausible. *Journal of Hebrew Scriptures* 10/10. 1-63.

Andrason Alexander 2010c. The "guessing" *QATAL* – the BH suffix conjugation as a manifestation of the evidential trajectory. *Journal for Semitics* 19/2. 603-627.

Andrason Alexander 2011a. Biblical Hebrew *Wayyiqtol* – a dynamic definition. *Journal of Hebrew Scriptures* 11/7. 1-50.

ANDRASON Alexander 2011b. The Biblical Hebrew verbal system in light of grammaticalization – the second generation. *Hebrew Studies* 52. 351-383.
ANDRASON Alexander 2011c. *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*. Madrid: Publicaciones de Universidad Complutense.
ANDRASON Alexander 2011d. Semantics of the *ta* construction in Basse Mandinka. *Linguistica Copernicana* 6. 221-244.
ANDRASON Alexander 2012a. When the *ima*-Perfect "Becomes" a Past. *Balcanistica* 25/1. 1-29.
ANDRASON Alexander 2012b. A non-unidirectional movement in the verbal system? *International Journal of Basque Linguistics and Philology* 46/1. 55-71.
ANDRASON Alexander 2012c. The meaning of the *YE* constructions in Basse Mandinka. *Philologia* 10. 21-38.
ANDRASON Alexander 2013a. Semantic network of the Basse Mandinka BANTA form. *Linguistics (Jezikoslovlje)* 14/1. 1-31.
ANDRASON Alexander 2013b. Mapping the meaning of the *be riŋ* formation in Basse Mandinka. *Journal of West African Languages* 40/2. 101-133.
ASHTON Ethel O. 1947. *Swahili Grammar*. London: Longmans.
BIRKMANN Thomas 1987. *Präteritopräsentia*. Tübingen: Max Niemeyer.
BLÁNQUEZ Fraile Agustín 1985. *Diccionario Latino Español. Vol. II*. Barcelona: Ramón Sopena.
BRYANT Alexandra 2007. *Xhosa for Second-Language Learners*. South Africa: Alexandra Bryant Publisher.
BYBEE Joan, Revere PERKINS & William PAGLIUCA 1994. *The Evolution of Grammar*. Chicago & London: The University of Chicago Press.
BURQUEST Donald A. 1991. Special section on Hausa narrative structure. *Journal of West African Languages* 21/2. 41-117.
CARON Bernard 1991. *Le haoussa de l'Ader*. Berlin: Dietrich Reimer.
COHEN Marcel 1995. *Traité de langue Amharique*. Paris: Institute d'Ethnologie.
COMRIE Bernard 1976. *Aspect: An Introduction to the Study of Verbal Aspect and Related Problems*. Cambridge: Cambridge University Press.
COOK John 2002. *The Biblical Hebrew Verbal System: A Grammaticalization Approach*. PhD dissertation. University of Wisconsin, Madison.
COOK John 2006. The Finite Verbal Forms in Biblical Hebrew Do Express Aspect. *Journal of Ancient Near East Studies* 30. 21-35.
COWGILL Warren 1975. More evidence for Indo-Hittite: The tense-aspect systems. In HEILMAN Luigi (ed.). *Proceedings of the Eleventh International Congress of Linguistics*. *Vol. II.* Bologna: Società Editrice il Mulino. 557-570.
CRESPO Emilio, Luz CONTI & Helena MAQUIEIRA 2003. *Sintaxis del Griego Clásico*. Madrid: Gredos.
CROFT William 2003. *Typology and Universals*. Cambridge: Cambridge University Press.
DAHL Östen 1985. *Tense and aspect systems*. Oxford: Blackwell.
DAHL Östen 2000. The Tense and Aspect Systems of European Languages in a Typological Perspective. In DAHL Östen (ed.). *Tense and Aspect in the*

Languages of Europe. Berlin & New York: Mouton de Gruyter. 3-25.
Danecki Janusz 1994. *Gramatyka języka arabskiego*. Warszawa: Wydawnictwo Akademickie Dialog.
Darwin Charles 1872. *The origin of species by means of natural selection, or the preservation of favoured races in the struggle for life*. New York: Modern Library.
Depraetere Ilse & Susan Reed 2000. The Present Perfect Progressive: Constraints on Its Use with Numerical Object Nps. *English Language and Linguistics* 4/1. 97-114.
Dillmann August 1907. *Ethiopic Grammar (Enlarged and Improved by C. Bezold, translated by J.A. Crichton)*. London: Williams & Norgate.
Długosz-Kurczakowa Krystyna & Stanisław Dubisz 2003. *Gramatyka historyczna Jezyka Polskiego*. Warszawa: Wydawnictwa Iniwersyttu Warszawskiego.
Donaldson Bruce 1993. *A Grammar of Afrikaans*. Berlin: Mouton de Gruyter.
Drinka Bridget 1998. The Evolution of Grammar: Evidence from Indo-European Perfects. In Schmid Monika, Jennifer R. Austin & Dieter Stein (eds.). *Historical Linguistics 1997*. Amsterdam & Philadelphia: John Benjamins. 117-133
Drinka Bridget 2003. The formation of periphrastic perfects and passives in Europe: An areal approach. In Blake Barry & Kate Burridge (eds.). *Historical Linguistics 2001.* Amsterdam & Philadelphia: John Benjamins. 105-128.
Durrleman Stephanie 2007. Completive Aspect in Jamaican Creole: The complete story?. *Generative Grammar in Geneva* 5. 143-157.
Ernout Alfred & Francois Thomas 1972. *Syntaxe Latine*. Paris: Klinksieck.
Faller Martina T. 2002. *Semantics and Pragmatics of Evidentials in Cuzco Quechua*. Ph.D. Dissertation. Stanford University, Stanford.
Futuyma Douglas J. 1998. *Evolutionary Biology*. Sunderland: Sinauer Associates.
Galadanci Muhammad K. M. 1976. *An Introduction to Hausa Grammar*. Ikeja: Longman Nigeria.
Gildersleeve, Basil L. & Lodge, Gonzalez 1895. *Gildersleeve's Latin Grammar*. London: Macmillan & Co.
Gouffé Claude 1963/1966. Les problèmes de l'aspect en haoussa. I – Introduction. Le problème de l'aoriste et de l'accompli II. *Comptes rendus du groupe linguistique d'études chamito-sémitiques [GLECS]* 10. 151-165.
Greenberg Joseph 1978. Diachrony, synchrony and language universals. In Greenberg Joseph, Ferguson Charles & Edith Moravcsik (eds.). *Universals of human language. Vol.1.* Stanford: Stanford University Press. 61-92.
Hackert Stephanie 2004. *Urban Bahamian Creole*. Amsterdam & Philadelphia: John Benjamins.
Harris Martin 1982. The 'past simple' and the 'resent perfect' in Romance. In Vincent Nigel & Martin Harris (eds.). *Studies in the Romance verb*. London & Canberra: Croom Helm. 42-70.
Haugen Einar 1972. The inferential perfect in Scandinavian. *The Canadian Journal of Linguistics* 17. 132-139.

HEINE Bernd 2003. On Degrammaticalization. In BLAKE Barry & Kate BURRIDGE (eds.), *Historical Linguistics 2001*. Amsterdam & Philadelphia: John Benjamins. 163-179.

HEINE Bernd, CLAUDI Ulrike & Friederike HÜNNEMEYER 1991. *Grammaticalization. A Conceptual Framework*. Chicago: University of Chicago Press.

HEINE Bernd & Tania KUTEVA 2006. *The changing languages of Europe*. Oxford: Oxford University Press.

HEINE Bernd & Tania KUTEVA 2007. *The Genesis of Grammar: a Reconstruction*. Oxford: Oxford University Press.

HENDERSON Linda & Debbie NEWSOME 1992. *Wolof Learning Manual*. Banjul: WEC International.

HOLM John 1988. *Pidgins and Creoles. Volume I*. Cambridge: Cambridge University Press.

HOPPER Paul & Elizabeth TRAUGOTT 2003. *Grammaticalization*. Cambridge: Cambridge University Press.

HUEHNERGARD John 1987. "Stative", Predicative Form, Pseudo-Verb. *Journal of Near Eastern Studies* 46/3. 215-232.

HUEHNERGARD John 2005. *A Grammar of Akkadian*. Winona Lake: Eisenbrauns.

ISAKSSON Bo 2000. Expressions of evidentiality in in two Semitic languages – Hebrew and Arabic. In JOHANSON Lars & Bo UTAS (eds.). *Evidentials: Turkic, Iranian and neighboring languages*. Berlin: Mouton de Gruyter. 383-399

JAGGAR Philip 2001. *Hausa*. Amsterdam: John Benjamins.

JAGGAR Philip 2006. The Hausa perfective tense-aspect used in wh-/focus constructions and historical narratives: a unified account. In HYMAN Larry & Paul NEWMAN (eds.). *West African Linguistics: Descriptive, Comparative, and Historical Studies in Honor of Russell G. Schuh*. Columbus: Ohio State University. 100-133.

JAXONTOV Sergej 1988. Resultatives: Classification and Calculus. In NEDJALKOV Vladimir (ed.). *Typology of resultative constructions*. Amsterdam & Philadelphia: John Benjamins. 101-106.

JOHANSON Lars 2000. Viewpoint operators in European languages. In DAHL Östen (ed.). *Tense and Aspect in the Languages of Europe*. Berlin & New York: Mouton de Gruyter. 27-187

JOHANSON Lars 2003. Evidentiality in Turkic. In AIKHENVALD Alexandra & Robert DIXON (eds.). *Studies in Evidentiality*. Amsterdam: John Benjamins. 273-291.

JÓNSSON Jóhannes G. 1992. The Two Perfects of Icelandic. *Íslenskt mál* 14. 129-145.

JOÜON Paul 1923. *Grammaire de l'hébreu biblique*. Roma: Institute Biblique Pontifical.

JUNGRAITHMAYR Herrmann & Mohammed MUNKAILA 1985. On the *sun*-set in Hausa. *Africana Marburgensia* 18. 63–71.

KIENAST Burkhart 2001. *Historische Semitische Sprachwissenschaft*. Wiesbaden: Harrassowitz Verlag.

KOUWENBERG N.J.C. 2010. *The Akkadian Verb and Its Semitic Background*. Winona Lake Indiana: Einsenbrauns.

KRAUS Fritz R. 1984. *Nominalsatze in altbabylonischen Briefen und der Stativ* (Mededelingen der Koninklijke Nederlandse Akademie van Wetenschappen, Afd. Letterkunde, Nieuwe Reeks, 47/2). Amsterdam, Oxford & New York: Noord-Hollandsche Uitg. Mij.

KURYŁOWICZ Jerzy 1964. On the Methods of Internal reconstruction. In LUNT Horace (ed.). *Proceedings of the Ninth International Congress of Linguists*. The Hague: Mouton. 9-31.

KURYŁOWICZ Jerzy 1972. *Studies in Semitic Grammar and Metric*. Wrocław: Zakład Ossolińskich, PAN.

LAMBDIN Thomas & John HUEHNERGARD 1998. *The Historical Grammar of Classical Hebrew: An Outline*. Cambridge: Unpublished course handout.

LESLAU Wolf 1967. *Amharic Textbook*. Wiesbaden: Harrassowitz.

LINDSTEDT Jouko 2000. The perfect – aspectual, temporal and evidential. In DAHL Östen (ed.). *Tense and Aspect in the Languages of Europe*. Berlin & New York: Mouton de Gruyter. 365-388.

LIPIŃSKI Edward 2001. *Semitic Languages Outline of a Comparative Grammar*. Leuven, Paris & Sterling: Uitgeverij Peeters en Departement Oosterse Studies.

LOESOV Sergey 2004. T-Perfect in Old Babylonian: The Debate and a Thesis. In KOGAN Leonid (ed.). *Babel & Bibel 1*. Moscow: Russian State University for the Humanities. 83-181.

LOESOV Sergey 2005. Akkadian Sentences about the Present Time - Part One. In KOGAN Leonid (ed.). *Babel & Bibel 2*: *Memoriae Igor M. Diakonof*. Winona Lake: Eisenbrauns. 101-148.

MAISER Gerhard 1998. *Historische Laut- und Formenlehre der lateinischen Sprache*. Darmstadt: Wissenschaftliche Buchgesellschaft.

MALAISE Michel & Jean WINAND 1999. *Grammaire raisonnée de l'égyptien classique*. Liège: CIPL.

MASLOV Jurij 1988. Resultative, Perfect and Aspect. In NEDJALKOV Vladimir (ed.). *Typology of resultative constructions*. Amsterdam & Philadelphia: John Benjamins. 63-85.

MCCAWLEY James 1971. Tense and Time Reference in English. In FILLMORE Charles & Terence LANGENDOEN (eds.). *Studies in Linguistics and Semantics*. New York: Holt, Rinehart & Winston. 96-113.

MEID Wolfgang 1971. *Das Germanische Praeteritum; indogermanische Grundlagen und Ausbreitung im Germanischen*. Innsbruck: Institut für Vergleichende Sprachwissenschaft der Universität Innsbruck.

MENGES Karl 1968. *The Turkic Languages and People*. Wiesbaden: Otto Harrassowitz.

MENU Bernadette 1993. *Petite grammaire de l'égyptien hiéroglyphique*. Paris: Geuthner.

MIGDALSKI Krzysztof 2006. *The Syntax of Compound Tenses in Slavic* (LOT Dissertation Series 130). Utrecht: Landelijke Onderzoekschool Taalwetenschap.

MITKOVSKA Liljana & Eleni BUZAROVSKA 2008. On the use of the *habere*-perfect in journalistic and administrative style. In TOPOLIŃSKA Zuzanna & Eleni BUŽAROVSKA (eds.). *Language Typology and Universals*. Berlin: Akademie Verlag. 128-138.

MNCUBE Francis S. M. 1930. *Xhosa Manual*. Johannesburg: Juta.
MÜHLHÄUSLER Peter 1986. *Pidgin and Creole Linguistics*. Oxford: Basil Blackwell.
NEDJALKOV Vladimir (ed.) 1988. *Typology of resultative constructions*. Amsterdam & Philadelphia: John Benjamins.
NEDJALKOV Vladimir & Sergej JAXONTOV 1988. The Typology of Resultative Constructions. In NEDJALKOV Vladimir (ed.). *Typology of resultative constructions*. Amsterdam & Philadelphia: John Benjamins. 3-62.
NEWMAN Paul 2000. *The Hausa Language: An Encyclopedic Reference Grammar*. New Haven: Yale University Press.
PAROZ R.A. 1959. *Elements of Southern Sotho*. Morija: Morija Sesuto Book Depot.
PARSONS Frederick W. 1960. The verbal system in Hausa. *Afrika und Übersee* 44. 1-36.
POKORNY Julius 1959. *Indogermanisches Etymologisches Wörterbuch*. Bern: Francke.
POLLARD Asuman & David POLLAR 1996. *Turkish*. London: Hodder Headline Plc.
PRINCE Ellen 2001. Yiddish as a contact language. In SMITH Norval & Tonjes VEENSTRA (eds.). *Creolization and contact*. Philadelphia & Amsterdam: John Benjamins. 263-290.
RIX Helmut 1976. *Historische Grammatik des Griechischen: Laut- und Formenlehre*. Darmstadt: Wissenschaftliche Buchgesellschaft.
ROBINSON Charles 1937. *Hausa Grammar*. London: Kegan, Trench, Trubner & Co.
ROWTON M. 1962. The Use of the Permansive in Classic Babylonian. *Journal of Near Eastern Studies* 21/4. 233-303.
SCHNEIDER Eric & Dorion SAGAN 2009. *La termodinámica de la vida*. Barcelona: Tusquets Editores.
SCHWENTER Scott 1994. The grammaticalization of an anterior in progress: Evidence from a Peninsular Spanish dialect. *Studies in Language* 18. 71-111.
SIL'NICKI George 1988. Structure of verbal meaning and the resultative. In NEDJALKOV Vladimir (ed.). *Typology of resultative constructions*. Amsterdam & Philadelphia: John Benjamins. 87-100.
SMITH Mark 1991. *The Origins and Development of the Waw-Consecutive: Northwest Semitic Evidence from Ugaritic to Qumran*. Winona Lake: Einsenbrauns.
SMITH Peter 1998. *Explaining Chaos*. Cambridge: Cambridge University Press.
SQUARTINI Mario & Pier Marco BERTINETTO 2000. The simple and compound past in Romance languages. In DAHL Östen (ed.). *Tense and Aspect in the Languages of Europe*. Berlin & New York: Mouton de Gruyter. 385-402.
SZEMERÉNYI Oswald 1980. *Einführung in die vergleichende Sprachwissenschaft*. Darmstadt Wissenschaftliche Buchgesellschaft.
TAGLIAMONTE Sali & Shana POPLACK 1993. The zero-marked verb: testing the creole hypothesis. *Journal of Pidgin and Creole Languages* 8/2. 171-208.
VAN DER MERWE Christo, NAUDÉ Jackie & Jan KROEZE 2000. *A Biblical Hebrew Reference Grammar*. Sheffield: Sheffield Academic Press.

WAGENSBERG Jorge 2007. *Ideas sobre la complejidad del mundo*. Barcelona: Tusquets Editores.
WALTKE Bruce & Michael P. O'CONNOR 1990. *An Introduction to Biblical Hebrew Syntax*. Winona Lake: Eisenbrauns.
WILKES Arnett & Nicholias NKOSI 2003. *Zulu*. London: Hodder & Stoughton Ltd.
WILSON Peter 1985. *Simplified Swahili*. Harlow: Longman.
WOLFF Ekkehard 1993. *Referenzgrammatik des Hausa*. Hamburger Beiträge zur Afrikanistik, 2. Münster & Hamburg: Lit.
ZAWADZKI Robert 2003. *Praktyczna Składnia Łacińska*. Częstochowa: WSP Częstochowa.