The grammar of ´non-realization´[1]

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1. Introduction

There are two major approaches to linguistic categorization: classical discrete categorization and gradient/fuzzy categorization. The classical approach to categorization goes back to Aristotle: categories are described in terms of a checklist of necessary and sufficient defining properties. This view has been very influential in linguistics, especially in theoretical frameworks.

A much more recent way of viewing categories is one where categories are accounted for both in terms of a checklist of properties as well as in terms of the gradience/fuzziness of their boundaries (Bolinger 1961, Langacker 1987, Aarts 2004, Aarts 2007). A gradience-acknowledging approach has proved to be very helpful in modeling linguistic phenomena from both a synchronic and a diachronic perspective.

It is a frequent pattern of scientific linguistic endeavor to "throw the baby out with the bathwater", every time a newly articulated insight captures the minds of linguists, and this was – indeed – the case with gradience, the result being an approach that could be succinctly summarized as "gradience is everywhere" (see Aarts 2007, Croft 2007).

The caveat here is: an adequate account of linguistic categories (model of grammar) should take into consideration both the discreteness and fuzziness/indeterminacy aspects of linguistic phenomena.

One of the theoretical pillars of the current study is Aarts´ 2007 model of categorial indeterminacy which proposes two major types of gradience – Subsective and Intersective. These capture the fuzzy character of English word classes, phrases, clauses and constructions. Subsective Gradience allows members of categories to display properties to varying degrees. Intersective Gradience (IG) involves two categories 'converging' on each other, such that there exist elements which display properties of both categories. The model is a compromise between having exclusively Aristotelian categories with sharp boundaries and allowing for gradience in terms of the number of properties that a member of a category possesses. It presents what is regarded to be the first exhaustive investigation of gradience in syntax from a synchronic perspective. The framework is an idealized model that is built around the idea that grammatical categories can be characterized by sets of morphosyntactic features. A methodological decision was taken to exclude semantic considerations. This was done in order to get a grip on complex arrays of phenomena. As we will see below, however, the model can also be applied to morphosemantic phenomena.

The other theoretical pillar of this investigation is the framework underlying grammaticalization theory as elaborated in Heine et al. 1991, Heine 1992, Heine and Kuteva 2002, Heine and Kuteva 2005, Heine and Kuteva 2006, Heine and Kuteva 2007, where linguistic categories are treated as continuous, "floating" phenomena through time and space from a panchronic – that is, both synchronic and diachroic – perspective. Notice that in grammaticalization studies, too, it has been argued that discreteness does have a place in a model where grammaticalization is seen as a gradual sequence of discrete micro-changes (Traugott & Trousdale 2010) involving "step-wise acquisition of properties" (Denison 2006: 300, 2010).

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Aarts' 2004 and Aarts' 2007 works on determinacy/indeterminacy in syntax sparked a series of articles on the feasibility of the distinction discreteness/abruptness versus gradience/fuzziness in linguistics (Croft 2007, Traugott & Trousdale 2010, among others), which address a fundamental issue in the discipline and are a part of an ongoing linguistic debate.

In the present paper we will claim that, in addition to the issues which have figured prominently in that debate already, there exists at least one more language phenomenon for the description of which we need to take recourse to the notion of discreteness, namely semantically elaborate grammatical categories (on the notion of semantically elaborate categories, see Kuteva 2009, 2010, and also discussion in the next section).

We will show that in the case of semantically elaborate grammatical categories it is important to posit boundaries to categories, in particular, sharp boundaries, and will argue that an Intersective Gradience approach can capture the nature of this type of categories.

Thus the contribution of the present study is twofold. At the empirical level, we investigate a number of Tense-Aspect-Mood form:meaning pairings – across a number of languages, both related and unrelated genetically and geographically – which have created notorious terminological confusion in the literature. Most of the grammatical structures we are concerned with here have remained largely under-researched, a notable exception being a most recent study on what has been referred to as "frustratives" in Overall 2017. On the basis of a cross-linguistic analysis of expressions for the non-realization of different degrees of the verb situation, we propose to distinguish between the following five categories:

a. apprehensional – non-realization of undesirable verb situation;
b. avertive – non-realization of once imminent, past verb situation where the verb situation is viewed as a whole (i.e. perfective);
c. frustrated initiation – non-realization of initial stage of past verb situation;
d. frustrated completion – non-realization of completion of past verb situation;
e. inconsequential – non-realization of expected result/resultant state of past verb situation.

At the theoretical level, we show that one of the reasons behind the confusion around the above categories is that they are semantically very rich – that is, they involve a cluster of specific semantic components – and this makes them hard to deal with in conventional frameworks. We argue that using the notion of an abstract prototype or the notion of *Gesamtbedeutung* (core meaning) in describing the above categories on a universal conceptual-semantic plane – in this particular case of what we will refer to as non-realization Tense-Aspect-Mood (TAM) semantically elaborate categories – would not get us far and would, in fact, result in unnecessary vagueness and imprecision. We will propose – instead – an account of these categories in terms of precise Aristotelian categorisation, whereby two (or more) distinct categories may converge on – that is, share – a number of properties and yet have strict boundaries. This proposal thus fleshes out – in a new area, namely the morphosemantic domain of verbal Tense-Aspect-Mood – the notion of Intersective Gradience, which Aarts 2004 and Aarts 2007 introduced with respect to word classes as well as phrasal and clausal syntactic structures.

In a study like the present one it is inevitable that one runs into a problem all comparative linguists are very well familiar with, namely the distinction between language-specific (grammatical) categories and cross-linguistically valid ones (for an excellent overview of this discussion in the typological literature, see Haspelmath 2007, 2010a, 2010b, Rijkhoff 2010, LaPolla 2016, among others). There are different standpoints taken in the literature to the suitability/unsuitability of this distinction. Thus on one view, which has been referred to as the Structuralist view, analysts of language should only study language-specific categories since each and every language has its own, specific "spirit" of conceptual

organization, and it is not justifiable to invest effort into artificially levelling up the differences between language particular systems. On another, eloquently elaborated view (Haspelmath 2007, 2010a, 2010b), language-particular grammatical categories should be studied in-depth within the system of the particular language under investigation, and parallel to this, comparative linguists are justified to *independently* apply special theoretical constructs termed "comparative concepts"; the latter concepts are a priori defined by typologists in the study of linguistic phenomena across languages. Crucially, the language-particular grammatical categories are not instantiations of the comparative concepts, i.e. there is a disconnect betwe en the former and the latter. Notice, however, that Haspelmath´s proposal gives full recognition to the deductive character of the typological procedure he advocates: once the comparative concepts are established by typologists as theoretical constructs, they are then matched to the phenomena of the particular languages under investigation.

The standpoint we take here goes counter to the Structuralist credo, since an exponentially increasing body of knowledge about individual languages indicates that there exist not only differences but also striking commonalities among languages, and deciding, a priori, to abandon all effort comparing these languages will deprive us – we believe – of valuable insights into, ultimately, the workings of the human brain.

Like Haspelmath´s comparative concepts (2007, 2010a, 2010b), the five categories we propose here, are not "stored" in the language user´s mind, they are theoretical constructs proposed by analysts of language. Moreover, they are categories identifiable not necessarily within the conceptual-semantic organization of individual languages but rather on what we refer to as a universal conceptual-semantic space. Again, like Haspelmath 2007, 2010a, 2010b, we apply deductive reasoning every time we examine a new language for the existence of any of the above categories. Where we differ from Haspelmath, however, is that our approach combines – very much like the classical scientific method and the methodology advocated in the Basic Linguistic Theory framework (Dixon 1997, Dryer 2006) – induction and deduction, whereby induction precedes deduction. Thus, starting from the facts of individual languages, we observe similar clustering of meaning features associated with specific means of expression – which are grammatical rather than lexical – and, using inductive reasoning, we abstract efficient "summaries" over the language-particular categories. These summaries consist of the characteristics the language-particular categories share, even though the latter might have additional, diverging characteristics in any individual language. In other words, our inductive reasoning results in cross-linguistically valid summary abstractions, whereby the langauge-particular categories can be regarded as the concrete instantiations – and therefore as members – of the cross-linguistically valid summary abstractions. Once we have arrived at these summaries we then apply them – by deduction – very much in a hypothesize-and-check manner, to new sets of linguistic data from new languages we want to examine for the existence of the categories under investigation.

Our approach thus comes closest to the approach taken in Bybee and Dahl (1989), who distinguish between (a) language-specific grammatical categories/grammatical morphemes/grammatical forms – which they term "grams" – on the one hand, and (b) cross-linguistically valid grammatical categories – which they term "gram-types", identifiable by their semantic foci and associated with typical means of expression (Bybee and Dahl 1989: 52) – and which are manifested in individual languages. Our approach is also highly

compatible with the distinctions "notional" ("semantic") vs. "grammatical"[2], on the one hand, and "universal" vs. "language-specific", on the other (Comrie 1976, 1981, 1985).

In other words, the way we identify cross-linguistically valid categories here is compatible with the approach Rijkhoff 2010 advocates for the purposes of linguistic comparison. Rijkhoff (2010: 95) proposes to employ functional categories rather than semantic or formal ones: "typologists first need to make sure that the forms or constructions under investigation do the same job in the various languages (*functional sameness*); subsequently this functional selection can be narrowed down on the basis of formal or semantic criteria to construct a set of elements that is similar enough to allow for crosslinguistic comparison (*formal and semantic similarity*)".

Finally, the five categories we propose can be characterized in terms of Ramat´s 1999 distinction between features (e.g. aspect, tense, modality, etc.) and values (e.g. progressive, past, counterfactual, etc.)[3] in the following way. Since these five categories are semantically elaborate, i.e. they have compositional character, as will be shown below, and since they encompass values of several features simultaneously, they can be regarded as what can be termed "grammatical feature hyper-values".

It is beyond the scope of this study to come up with a straightforward terminological framework to be applied in linguistic typology; following Kuteva et al. 2019, here we are going to use the terms grammatical category and functional category interchangeably for cross-linguistically identifiable grammatical structures which involve a particular set of meaning components and are associated with a particular means of expression (i.e. grammatical rather than lexical) that serves a particular function. We will be using the expression *form:meaning pairing* to refer – in a rather general sense – both to language-specific and cross-linguistically valid categories. Notice, however, that whenever we want to draw attention to the language-specific characteristics that the above five categories manifest in individual languages, we will follow Haspelmath´s 2010a proposal to capitalize the term for the particular category under discussion as well as to point out the language in which it is observed (cf. the avertive vs. the Bulgarian Avertive).

Whereas the apprehensional is relatively well-studied, the other four categories have either not been given any recognition as grammatical structures at all or they have been subsumed under one and the same cover category, or alternatively – depending on author – there have been proposals to lump various combinations of these categories into different "umbrella" categories.[4]

2. Semantically elaborate grammatical categories

Up until the early 80s of the last century it was common practice to assume that a grammatical category can be straightforwardly assigned to a particular conceptual-semantic domain. As a matter of fact, belonging to a particular domain was such a strong assumption that in some cases it had even gained the status of a definitional criterion for the notion of grammatical category. For instance, the SIL (Summer Institute of Linguistics) glossary[5] of linguistic terms defines a grammatical category as a set of syntactic features that express meanings from *the same conceptual domain* [emphasis ours], occur in contrast to each other,

[2] We tacitly assume that all languages have the means to express all notions; where languages differ is whether they dispose of lexical (single unit or complex construction) means vs. grammatical means to do that.

[3] A similar distinction made in the literature is the one between "dimensions" vs. "categories" (with thanks to an anonymous reviewer).

[4] That the literature on what has been referred to as the avertive and the frustrative is extremely confusing is amply discussed in Zester (in preparation), where it is argued that these structures should be treated as two distinct categories.

[5] http://www.sil.org/linguistics/GlossaryOflinguisticTerms

and are typically expressed in the same fashion, e.g. aspect, case, definiteness, mood and modality, noun class, number, polarity, tense, transitivity, voice. Kuteva 2009, 2010 has referred to grammatical categories understood in the above sense – e.g. the past tense in English in its primary, deictic function – as ´semantically straightforward categories´.[6]

In more recent decades, however, there has appeared a vast literature acknowledging the fact that – especially in the area of tense, aspect and mood (and most recently, also evidentiality) – very often it is extremely hard to establish clear boundaries between tense, aspect and mood/modality and that categories cut across different conceptual-semantic domains (see Dahl 1985, Iatridou 2000, Ziegeler 2000, Palmer 2007, Verstraete 2005, Hacquard 2006, among others). This view culminates in the standpoint taken in Dahl (2015: 210-213): "It should be noted from the outset, however, that tense, aspect, mood, and evidentiality do not usually come neatly lined up as separate categories in grammars. Rather, the meanings of TAME [Tense-Aspect-Mood-Evidentiality] forms often combine elements from more than one of them." The form:meaning pairings we investigate in this study behave very much like the ones referred to in Dahl 2015 above: they encode more than one semantic feature and may involve more than one conceptual-semantic domain. Kuteva 2009, 2010 termed this kind of categories *semantically elaborate grammatical categories,* or semantically "rich" categories since they may relate to more than one conceptual-semantic domain simultaneously.

Notice that the distinction *semantically elaborate* vs. *semantically straightforward grammatical categories* is not related to phenomena such as the semantic-conceptual break-down into stages of the progression of an event (initiation, progression, completion), for instance, although we do sometimes count these as distinctive features. What it is relevant to – instead – is semantic complexity along any dimension. We have to bear in mind, however, that there are constraints on this semantic complexity. Although there is great variation among the world's languages, when investigating many genetically, typologically and areally diverse languages, a number of "cumulative" (that is, *semantically elaborate*) categories do emerge: they express – simultaneously – certain features that do occur together more often than others in one linguistic form. If there is clustering together of particular features, this cannot be by chance; most likely, these will be semantically related ones. For instance – as Paolo Ramat (p.c.) points out to us – ´it is highly unlikely to come across a language that will have the same encoding for "to the right" and "to the left"´, provided that these two notions exist in the minds of the users of that particular language. On the other hand, it is no surprise that in Bulgarian the grammatical form for the imperfect, *–še* (3rd person, sg) encodes past time, imperfective aspect and, in an *if*-clause context, also the irrealis: this makes perfect sense given that the imperfect refers *per se* to a non-bounded – i.e. not having been (fully) realized – verb situation[7].

Notice that here we use the expressions *meaning components, semantic features, properties* and *attributes* interchangeably. By these expressions we do not mean "semantic primitives" (i.e. minimal units of meaning), nor do we assume them to have the same status of necessary and sufficient conditions; we follow Cruse 1986 in assuming that meaning components can be not only criterial but also expected, unexpected, or possible attributes. For us, the expressions *meaning components, semantic features, properties, attributes* stand for portions

[6] What is referred to by means of the term *semantically straightforward grammatical categories* are form:meaning pairings that are dedicated to expressing a single function, or that have one primary function, whereby they may have one or more secondary functions.

[7] As an anonymous reviewer points out to us, "there is a semantic parallel between imperfective and irrealis, but there is also an important difference. For the imperfective, ´not having been (fully) realized´ would mean not having been (fully) realized at reference time´, whereas in the case of irrealis (or perhaps better, counterfactual, since irrealis is a wider concept) it would rather be ´never realized et al.´".

of meaning which can be used as distinctive features in the definition of different categories. A decompositional approach commits the researcher to an exhaustive account of meaning in terms of a set of semantic components and meaning is understood as equivalent to this set of components in their various subsets and combinations[8]. By contrast, we don't claim to be able to accout for meaning in this way, but rather we look for ways to zoom in and point to some portions of meaning, namely those that can be used as distinctive features in the definition of different categories. We don't, however, propose to reduce meaning to a set of such features, rather we are looking for ways that will allow us to compare and contrast categories with similar meanings across different languages. Kuteva 2009 exemplifies semantically elaborate grammatical categories by means of the avertive, a grammatical category recently identified across languages (Kuteva 1998, 2001, Heine and Kuteva 2002). The avertive is used only in past contexts and in Kuteva 1998, Kuteva 2001, Heine and Kuteva 2002, it is treated as a linguistic expression standing for a verb situation which was on the verge of taking place but did not take place ("was on the verge of V-ing but did not V"):

(1) Bulgarian
Štjax da padna.
want.1SG.IMPF to fall.down.PFV.1SG.PRES
'I nearly fell down.'

(2) Southern American English
I liketa *had a heart attack.*
'I almost had a heart attack.' (Kytö & Romaine 2006)

(3) Venda
Ndo ʈoḓo- u mu rwa[9]
I want.PERF- INF him hit
'I nearly hit him.' (Poulos 1990: 332)

(4) Koasati
im- ho:pá:ci- l- á:pi- Vhco- k am- mátta- t
3DAT- hurt- 1SS- MODAL- HABIT- SS 1SSTATS-miss- PAST
'I almost injured him but I missed.' (Muskogean; Kimball 1991: 196)

In the above works the avertive has been described as involving at least three conceptual-semantic domains: temporality (pastness), aspectuality (imminence), and modality (counterfactuality/non-realization).[10] Notice, however, that more careful observations on the nature of avertive structures reveal that in these languages where there is a grammatical distinction between perfectivity versus imperfectivity – that is, aspectual boundedness versus non-boundedness of the verb situation – the main verb slot in the avertive structure is filled out by a perfective verb. In other words, the verb

[8] An anonymous reviewer adds that "more broadly, in dealing with a complex interplay of meaning components, it is important to distinguish which of these are entailed, which are implicated, and which are presupposed."
[9] Notice that the auxiliary expression *ʈoḓou mu rwa* (AUXILIARY-OBJECT-MAIN VERB) in this example is the result of the following grammaticalization development: Venda *ʈoḓa u* (wanted:PERF INF) 'have wanted to', verb form > *ʈoḓou,* Avertive (´almost´ marker, Poulos 1990: 332).
[10] In order to avoid confusion with the semantic notion of ´counterfactuality´ which has been used in a specialized way in the literature, here we are using the term *non-realization* to refer to the modal meaning component of the avertive.

situation encoded by the main verb is viewed as bounded. Hence, in the present study we propose a more fine-grained definition of the avertive, which explicitly includes perfectivity as one of its meaning components. This means that for expressing the avertive, not only are perfectives used in the languages that have them but also that the avertive entails semantic perfectivity also in the languages that do not mark it grammatically (with thanks to an anonymous reviewer). Accordingly, the avertive can now be defined as "a structure which stands for a bounded verb situation – viewed as a whole – which was on the verge of taking place in the past, but didn't".

A similar semantic construct was identified in Hindi (Abbi 1980) and in a large number of Indo-Aryan languages (Abbi 1992). It was then (1980) termed "non-precipitative" (see Section 3.2 below).

That the semantics of the avertive is elaborate – i.e. rich in specificities – becomes clear when we compare the avertive to another grammatical category, which was also identified across languages only very recently, the proximative.

The proximative has been noticed in a number of individual languages but has been traditionally considered a specific verb construction rather than a grammatical category[11]. An exception to this practice is Comrie (1976: 64–5) and Comrie (1985: 95), who has not only pointed it out (under the names of "prospective", and "immediate future", respectively), but has, moreover, acknowledged that the form in question expresses a grammatical distinction (see also Jendraschek 2014 and Brabantier et al. 2014). Heine 1992 showed that the proximative (which he first called an "almost"-aspect) is a fully-fledged grammatical category across languages. König 1993 presented a further investigation of the same gram and proposed the term proximative[12] which has been adopted by Heine and his associates in a number of subsequent works (Heine 1994a, 1994b, Kuteva 1995, cf. also Romaine 1999).

The proximative defines a temporal phase located close before the initial boundary of the situation described by the main verb. It indicates a moment shortly before the possible occurrence of the given verbal situation, with (crucially) no implication about whether the situation actually occurred or not. Yet another essential characteristic of the proximative is that it can be used in both past and non-past contexts*;* consider, for instance example (5) from Nandi, where the volitional verb *want* has come to function as the auxiliary of the grammaticalized Proximative construction:

(5) Nandi (Southern Nilotic, Nilo-Saharan)
mâ- ko-rárak- tà así:s(ta)
want-3- fall- ITIVE sun(NOM)
'The sun is about to set.' [Kuteva 2001]

[11] It has to be pointed out that it isn't easy to answer the question of what formal properties are criterial for awarding (a set of) linguistic elements the status of a grammatical category. Much of the literature focuses mostly on inflected forms when discussing grammatical categories (or features), though grammars also allow combinations of a lexical and a functional element. As our focus here is on semantics, we have adopted a wider view on what formal properties count as grammatical. We have assumed that combinations of functional and lexical elements can have grammatical meanings, but that grammatical meanings can also be associated with the constructions in which such elements are embedded.

[12] In an excellent cross-linguistic study of what he calls "antiresultatives" Plungian 2001 also uses the term "proximative", but the meaning he assigns to this term is different. In Plungian's 2001 terminology, proximative is a structure "*oboznačajuščij nedostiženie finala v slučae nekontroliruemogo processa*" [Transl.: "standing for the non-reaching the end of an incontrollable process"], which comes closest to our frustrated completion (see below).

In other words, the proximative is a purely aspectual[13] gram, its essential semantic characteristic being imminence[14].

From the above it becomes clear that it is justifiable to treat the avertive as semantically more elaborate than the proximative. The most obvious argument in favor of such an account is the fact that the semantics of the former (past-plus-imminent-plus-non-realized-plus-perfective) subsumes the semantics of the latter (imminent).

3. Tense-Aspect-Mood semantically elaborate categories in the "grammar of non-realization"

That "we construct reality through the language we use" is a foundational idea of language relativism. Here we take the standpoint of the golden middle between strict language relativism on the one hand and language universalism on the other, and assume that we construct reality through the ***languages*** we use. What is methodologically important for us is that the more languages we analyse, the more refined a picture of human conceptual-semantic reality we get. Accordingly, we will make a distinction between a universal conceptual-semantic space and language-specific conceptual-semantic space. Using the sizable body of knowledge accumulated over the last decades in the study of grammaticalization developments across languages (see Kuteva et al. 2019), we will plot the grammatical categories investigated here in the universal conceptual-semantic space. Notice that – as an anonymous reviewer points out to us – this does not mean that the apprehensional, the avertive, frustrated initiation, frustrated completion, and the inconsequential are discrete semantic categories in all languages. Our claim here is that some languages grammaticalize these particular clusters of meaning components, whereas others express them by lexical means.

We are now in a position to refer to our object of investigation as that portion of the universal conceptual-semantic space of what we can call – temporarily – the TAM "grammar of non-realization". Cross-linguistic data allows us to divide this space into at least five distinct sub-portions each of which is found to be encoded by grammatical – or grammaticalizing (lexico-grammatical) – linguistic structures. As the name of that conceptual-semantic space suggests, there is at least one meaning component which all of these structures share: they all refer to situations that have in some way or other not been (fully) realized. However, depending on the particular structure, the non-realization may involve different aspects of the verb situation. In some cases the focus may be on the non-realization of the verb situation as a whole, in its entirety (apprehensional). In other cases the focus may be on the non-realization of the verb situation – as a whole – which was about to take place in the past (avertive). The focus may also be on the non-realization of the initial stage (frustrated initiation) or of the final stage of the verb situation (frustrated completion). Finally, the non-realization may be a characteristic not of the verb situation itself but of its expected/wished for result or resultant state (inconsequential). In other words, the underlying criterion according to which the "non-realization space" discussed here is structured is degree of realization of the verb situation and/or its expected result/resultant state.

On the basis of cross-linguistic grammatical comparison in what follows we will build a case for the existence of a five-portion conceptual-semantic frame represented in

[13] For a detailed argumentation concerning the aspectual character of the proximative, the reader is referred to Heine 1992.

[14] Judging from the definition of the word *imminent* given in OED, one could distinguish between no fewer than three distinct senses in which this word is used: (1) closeness in time; (ii) being threatening or dangerous, and; (iii) being highly probable if nothing is done about it (with thanks to an anonymous reviewer). As must have become clear from the preceding discussion, it is only (i) that is essential for the present study.

Figure 1 below. Each of the entities in this frame is instantiated in a distinct, TAM form:meaning pairing in some languages:

<insert Figure 1 here>

The ordering in (i) - (v) of the structures under discussion is not meant to represent their diachronic development; what it represents instead is a synchronic continuum of different degrees of realization of the verb situation. We have placed the structure encoding the highest degree of verb situation non-realization (i.e. unreal), the apprehensional, at the beginning of this continuum, and the structure encoding the lowest degree non-realization (i.e. real), the inconsequential, at the end of the continuum. Whereas with the apprehensional the entire verb situation is unrealized (i.e. the resulting degree of verbal situation realization is zero), with the inconsequential it is not the verb situation but rather the expected resultant state that remains unrealized (i.e. the resulting degree of the verb situation realization is full but the resultant state is absent or incomplete). As will become clear from the discussion below, each of the TAM categories in Figure 1 constitutes a cluster of more than one grammatical feature values (in Ramat's 1999 sense), i.e. each is a semantically elaborate category.

3.1 Apprehensional

The apprehensional involves the highest degree of non-realization of a past/non-past verb situation. It encodes an undesirable verb situation which is to be avoided. In describing what he calls "apprehensional-epistemic modality" Lichtenberk (1995: 293) explicitly points to the fact that we are dealing here with a mixture of semantic components, i.e. a semantically elaborate grammatical category:

> A mixed modality which on the one hand gives information on the factuality of the situation, which is counter- (or non) factual and on the other hand states the "attitude [of the agent or the speaker] concerning the desirability of the situation encoded", which is undesirable.

The apprehensional is a structure – very often embedded in subordinate clauses – that has been referred to as the "apprehensive", the "adverse consequence clause", the "negative purpose clause", the "evitative", the "precautioning", or the "*lest*-clause" (Angelo and Schultze-Berndt 2016, Austin 1981, Dench 1988, Dixon 1980, 2002, Epps 2008, Lichtenberk 1995, Vuillermet forthc.). The undesirable situation is generally portrayed as counterfactual, and the canonical apprehensional construction is in two parts: one depicting a preemptive action, and another outlining a negative situation. In less canonical extensions of this category, the preemptive action may be elided or simply implied by context (Evans 1995: 264).

Thus our definition of the apprehensional involves two verb situations, Verb Situation X and Verb Situation Y. Verb Situation X (whether explicitly marked or left implicit) is featured as the one causing the avoidance of the undesirable Verb Situation Y.

The apprehensional was first established in a number of Australian, Austronesian and Amazonian languages. Dixon 1980, for instance, describes the Apprehesional in Yidiny as an inflexion which specifically marks the verb of a subordinate clause, and denotes an undesirable event which is to be avoided; the main clause involves steps to be taken to effect the avoidance. The causality involved is clear: the verb situation in the main clause causes the avoidance of the verb situation in the subordinate clause. It is expressed by two suffixes, *-l* (which is one of the non-past verb suffixes in Yidiny, see Dixon 1980: 380) followed by the suffix *–ji*:

(6) Yidiny

Yiŋu waguuja garba- ŋ gudaga- ŋgu
this.ABS man.ABS hide- PRES dog- ERG
bajaa- l- ji
bite- APPREHENSIONAL
'The man is hiding, lest the dog bite him (i.e. for fear that the dog might otherwise bite him).' (Dixon 1980: 380)

Dixon (1980: 380) points out that the Yidiny Apprehensional can also be used in past contexts such as "I didn't go across the muddy patch lest I slip down", in other words, there is no temporal restriction for the use of this expression.[15] Instead, there is the following morphosyntactic restriction in Yidiny: the Apprehensional inflexion can only be used in subordinate clauses.

Austin (1981: 224ff.) refers to this structure as the *lest*-clause in Diyari and Dhirati, and so do Dench (cf. the *lest*-construction in Dench 1988: 108ff., see also Zester 2010) in his description of Martuthunira and Smith 2015 in a recent description of Papapana. Austin (1981: 224–226) defines *lest*-clauses as clauses which "basically serve to indicate some situation which the speaker considers to be unpleasant and which should be avoided" and points out that *lest*-clauses – which in Diyari and Dhirati are marked by the affix *–yaṯi* – follow the main clauses to which they are subordinated, and that it is possible to have a tense inflexion for the main clause verb:

(7) Diyari

pulaɳa miŋka-ɳi kuṯi- ipa- yi/ ṯanali ɳayi- yaṯi paḷpa- li
3DLO hole- LOC hide- TR- PRES 3PLO see- LEST some- ERG
'(He) hides them in a hole lest some of the others see (them).' (Austin 1981: 226)

Virgin Islands Dutch Creole offers a semantically transparent example of how a structure which initially involved a temporal subordinate clause – a clause beginning with the temporal adverb *fo* "before" – gave rise, over time, to the Apprehensional structure in that language, as the two sentences (8) and (9) show, respectively:

(8) Virgin Islands Dutch Creole (Van Sluijs 2015)

Ju fo bli een jaa mi ons, ***fo*** *ju nee am fa ons.*
2SG MOD stay INDF year with 1PL before 2SG take 3SG of 1PL
'You must stay with us for one year, before you take her from us.'

(9) Virgin Islands Dutch Creole (Van Sluijs 2015)

Dan Anáánsi a ho fo loo bet padún
then A. PST have FO go ask pardon

fo *sini du am a fort.*
before 3PL do 3SG LOC prison
'Then Anansi had to ask for forgiveness, lest they put him in prison.'

[15] Notice that this lack of temporal restriction only refers to the precautionary situation, i.e. to the verb situation denoted by the main clause; it may – or may not – be realized; the apprehension-causing situation, however, remains unrealized – at reference time – by definition.

As pointed out already, there are languages which possess a dedicated grammatical morpheme encoding the apprehensional also at the level of the main clause, as the particle *ngaja* in (10) in Ngarinyman (Ngumpin-Yapa, Pama-Nyungan, spoken in Australia) illustrates:

(10) Ngarinyman (Angelo and Schultze-Berndt 2016: 256)

Ngaja=ngali	*bayalan*	*guliyan*	*garraga*.
APPR=1DU.INCL	bite:PRS	dangerous	frill.necked.lizard

´It might bite you and me, the dangerous frill-necked lizard.´

The grammatical semantics of the apprehensional can thus be represented as a cluster of the meaning components presented in Table 1:

Table 1. Apprehensional

(i) Non-realized verb situation as a whole
(ii) Undesirability of verb situation
(iii) Causality: Verb Situation 1 causes avoidance of undesirable Verb Situation 2

Notice that there exists at least one language with two distinct morphosyntactic structures for coding apprehension of an undesirable situation which is to be avoided, depending on whether this is expressed by means of a bi-clausal structure or by a monoclausal one. This is the Amazonian language Ese´eja (Vuillermet, forthc.). EXAMPLE!!!! For the bi-clausal structure Vuillermet uses the term "Precautioning", and to the distinct morpheme suffixed to the verb in a monoclausal structure she refers as the "Apprehensive". In spite of this fact, here we treat both bi-clausal and monoclausal structures expressing the meaning of non-realized undesirable verb situation that is to be avoided as manifestations of the same grammatical category, for the following reasons: (i) in many languages these are the same, and; (ii) there is also a fairly regular pathway between the two in the process of insubordination leading from the bi-clausal to the monoclausal structure (see also Evans 2007, Angelo and Schultze-Berndt 2016).

To sum up, the apprehensional is a semantically elaborate grammatical structure[16], for the following reasons. First, it encodes causality (Verb Situation 1 causes avoidance of Verb Situation 2); second, it involves an undesirable verb situation; third, it describes a verb situations a whole that is assessed as non-realized; hence (a) the frequent similarity/identity of form between the expression of apprehensional and irrealis semantics, see, for instance, Dixon (1980: 381), and (b) the use – in some languages – of a negator (Bond 2011).

Even though the subordinate – or the *lest* – clause expresses a verb situation which is a potential expected outcome, it is clear that there is zero degree of realization of that situation. Therefore, we have placed the apprehensional at the beginning of the non-realization continuum in Figure 1.

3.2 Avertive

Unlike the apprehensional, which involves non-realized undesirable events to be avoided – either in the past or in the non-past – the avertive involves past verb situations that almost

[16] Notice that in those cases when the apprehensional is expressed by a bi-clausal structure, it is the whole bi-clausal construction and the situation it describes which is 'elaborate'. In this sense it is justifiable to speak of elaborateness of semantics matched to "distributed" morphosyntactic form.

took place but didn't (see Kuteva 1998, where the avertive was firstly introduced as "action narrowly averted" (ANA), but was later re-labelled as the avertive in Kuteva 2000, 2001) as a verbal grammatical category. Since we have discussed the avertive already (see Section 2 above), we are now in a position to summarize its properties in Table 2:

Table 2. The avertive
(i) Non-realized verb situation as a whole
(ii) Imminence
(iii) Pastness
(iv) Perfectivity

The non-lexical expressions for the avertive vary between purely grammatical inflections and lexico-grammatical constructions, using particles plus a verbal inflection. Kayardild, a Tangkic language (non-Pama-Nyungan) of Bentinck Island, north-west of Queensland, is one of the languages featuring a separate avertive verb inflection amongst its thirteen verbal inflections. The "almost" suffix *–nangarra* in Kayardild is attached to the verb that describes an action or event that almost happened at some point in the past. For example:

(11) Kayardild

bulkurdudu	*ngijin-*	*jina*	*baa-*	*nangarra*	*krthurr-*	*ina*
crocodile.NOM	1SG.POSS-	M.ABL	bite-	nangarra	shin-	M.ABL

'A crocodile almost bit me on the leg.' (Evans 1995: 261)

Gooniyandi, however, another Australian language, uses a lexico-grammatical adverbial construction to convey avertive meaning: The particle *wambawoo* meaning 'nearly' in Gooniyandi "occurs only with VPs in the potential mode, and indicates that although the process did not actually occur, it very nearly did":

(12) Gooniyandi

Wambawoo	*gardyanirni*
nearly	she:could:have:fallen

'She nearly fell.' (McGregor, 1990: 512)

A very well-described structure expressing avertive meaning – which was termed "non-precipitative aspect" and was attested as early as Abbi (1975, 1977, 1980)[17] – involves a bi-clausal structure where the second clause has adversative semantics. Abbi (1992) describes the non-precipitative as a situation "where the main event/action, represented by the Main Verb (Y) occurs on the verge of operation of another event/action, manifested in Reduplicated Verbal Adverb (X), and puts a stop on the operation of X; the result is that X never takes place…The verb inflection for Reduplicated Verbal Adverb for simultaneity and non-precipitation is identical in many of the languages". Notice that what is crucial here for the non-realized component element of the non-precipitative structure is that there is a second clause with adversative semantics. Abbi (1992) describes this clause as a "counter-proposition either with negative marking or with contrasting verbs".

[17] This is an areal feature and thus, is shared by a large number of languages of the Indo-Aryan, Dravidian (except Tamil and Malayalam), Munda and Tibeto-Burman languages of South Asia [Abbi 1992]

Examples of the non-precipitative involve a limited number of antithetical verbs (on the notion of antithetical verbs, cf. Abbi 1992)[18] specialized for marking avertive meaning, i.e. *bəc* 'be saved from something/escape', *ruk* 'stop something', *cʰoɽ-de* 'leave something', *cʰuɽ-ja* 'miss out', *rah-ja* 'stay/leave out', and *cuk* 'miss (a target)'[19]*:*

(13) Hindi

barIʃ	*ho-*	*te*	*ho-*
rain	happen/to.be-	PRES.IMPFV.VADV	happen/to.be-

te	*rɛh*	*gəi*
PRES.IMPFV.VADV	stay/leave.out	go.away.F.PFV

'It was going to rain but did not.' [Abbi 1980]

Importantly, it is the combination of the antithetical verb of the second clause and the reduplication of what Abbi refers to as the Verbal Adverb of the first clause that result in the meaning of the non-precipitative. In other words, in addition to past, the main verb in a multi-clausal sentence has to be antithetical. If it isn't, the avertive meaning does not arise. Non-antithetical verbs do not give us the reading of the avertive. Consider the Hindi sentences (14a) and (14b) below, where the action of *read* in (a) was undertaken but in (b) although it was on the verge of being undertaken it never took place. A similar situation is exemplified in (15a) and (15b):

(14a) Hindi

bhəɪya	*kɪtab*	*pəɽʰ-te*	*pəɽʰ-te*
brother	book	read-PRES.IMPF.VADV	read- PRES.IMPF.VADV

so	*gəya*
sleep	go.M.PFV

'The brother went off to sleep as he was reading the book.' [Abbi 1980]

(14b) Hindi

bhəɪya	*kɪtab*	*pəɽʰ-te*	*pəɽʰ-te*
brother	book	read- PRES.IMPF.VADV	read- PRES.IMPF.VADV

rɛh	*gəya*
stay/leave.out	go.M.PFV

'The brother was about to read the book but did not.' [Abbi 1980]

(15a) Hindi

bəcca	*palne-se*	*gɪr-te*	*gɪr-te*
child	crib-ABL	fall- PRES.IMPF.VADV	fall- PRES.IMPF.VADV

ro-*ya*
cry-M.PAST.PFV

'The child cried while he was falling from the cradle'. [Abbi 1977]

(15b) Hindi

bəcca	*palne-se*	*gɪr-te*	*gɪr-te*
child	crib-ABL	fall- PRES.IMPF.VADV	fall- PRES.IMPF.VADV

[18] As Ayesha Kidway (p.c.) rightly points out to us, all antithetical verbs – predictably – involve some sort of telic, or delimitative, semantics.

[19] There are eight antithetical verbs all in all: *bəc, ʈəl, rʊk, cuk, rɛh, cʰoɽ, cʰuɽ,* and *ʈʰeher.*

bəc *gəya*
be.saved.from/escape go.M.PFV
'The child was on the verge of falling down from the crib but did not.' [Abbi 1977]

As pointed out in Section 2 above, in those languages which make an obligatory distinction between perfective (verb situation viewed as a whole) and imperfective (verb situation viewed as unfolding/continuative/durative), the main verb in the avertive structure is in the perfective, i.e. the state of affairs it denotes is viewed in its totality, as a bounded whole.

Since the avertive denotes the non-realization of a past verb situation which was imminent, that is, closer to realization than in the case with the apprehensional, we have placed the avertive in the second place in the continuum in Figure 1.

3.3 Frustrated initiation

Frustrated initiation encodes a past verb situation which was about to begin but was frustrated before initiation. Whereas the avertive is about a past verb situation which has not been realized whereby the verb situation is viewed as a whole, what we refer to as frustrated initiation is about a past verb situation whereby what is foregrounded is its initial stage. In other words, even though the verb situation itself might not have been initiated, some prior action indicating the possibility of that verb situation has occurred. Hence, we have placed the frustrated initiation structure after the avertive in Figure 1.

Table 3. Frustrated initiation
(i) Non-realized initiation of verb situation
(ii) Imminence
(iii) Pastness

Tibetan appears to have grammaticalized an auxiliary verb structure for the expression of frustrated initiation (with thanks to Abel Zadoks, p.c.). It consists of:

a) The exceptional use of the infinitive constructed with a postverbal allative rather than with a postverbal illative, the latter being the regular way of constructing infinitives in Tibetan, and;
b) The auxiliary verb *thug* derived from a lexical verb meaning 'arrive, reach, touch', i.e. the verb refers to motion up to a certain point, without entering (with thanks to Abel Zadoks, p.c.):

(16) Tibetan

nu.bo 'i'	*dab.ma*	*ñi.mas*	*tshig*	*la*
my.brother GEN	wing	sun.INS	get.burnt	ALL
thug	*nas*			
arrive/reach/touch	ELA			

(bird speaking:) 'My younger brother was about to get burnt by the sun.' (but I prevented it). (Old Tibetan Ramayana, de Jong 1977: line A230)[20]

The construction with the allative infinitive and the auxiliary verb *thug* 'arrive, reach, touch' in the above example means that the event was bound to happen were it not prevented. The postverbal elative makes the relative past explicit. Metaphorically speaking, one could

[20] The dots merely serve to indicate that a polysyllabic word is glossed as a unit.

envisage this as a (intransitive) Subject that is about to "enter" a verb situation, and in fact "touches" the initial boundary of that situation, but is then prevented from entering it.

Notice that though at this point the event is not yet explicitly said to be prevented, it is only in this kind of situation that the allative is used for infinitives. As pointed out above, the regular way of constructing infinitives is with a postverbal illative (with thanks to Abel Zadoks, p.c.):

(17) Tibetan

Ra.ma.na-	*dag=*	*kyaŋ sla-*	*r*	*log-*	*du*	*ñe-*	*ste*
Name-	CLC=	CNC back-	ILL	turn-	ILL	approach-	CNJ

(narrator:) 'Rāma and his company were about to return' (and they did). (Old Tibetan Ramayana, de Jong 1977: line A164)

The two infinitival constructions differ in temporal structure precisely as one would expect from the illative/allative contrast.

In other words, the nature of the construction "infinitive with a postverbal allative" + *thug* (aux.) itself implies non-realization, which is then confirmed by (the right) context. Even though the imminent event is envisaged as real, it is not realized yet. The temporal implication is one of pastness, even though Tibean has relative tense, so the absolute reference would depend on the position in the clause chain**.** Such an analysis then illustrates a ´constructional´ view of grammatical meaning, since we attribute the semantics not just to the words (morphemes) and their combinations, but we consider it arising from the construction itself.

Notice that in some languages the very fact that it is verbs denoting the beginning of a verb situation that can be used in the main verb slot enhances the semantics of the whole structure: it is the beginning of the verb situation that has been frustrated. Thus in the so-called "preventive" construction in Russian (Malchukov 2004: 194) *bylo* (be.3SG.PAST.NEUT) + main verb (PAST) (Vinogradov 1972 : 463; see also Plungian 2001), the main verbs are clearly marked as inchoative by Aktionsart prefixes such as *po-* in the verb *pošel* in the examples below:

(18) Russian

Ja	*bylo*	*pošel*,
I	be.3SG.PAST.NEUT	depart.PAST.M
no...	*ostanovilsja.*	
but	stop.PAST	

'I nearly started on my way but... (then) I stopped.'

An even better example comes from the Russian National Corpus[21] and dates back to the year 1864:

(19) Russian

Ja	*bylo*	*pošel*	*na*	*lestnicu,*
I	be.3SG.PAST.NEUT	depart.PAST.M	on	staircase
no	*on*	*ostanovil*	*menja.*	
but	he	stopped	me	

'I nearly started on my way upstairs, but he stopped me.' (F. M. Rešetnikov, *Meždu l'udmi* 1864)

[21] http://www.ruscorpora.ru

The most frequent occurrences of this construction are with animate subjects, as in the example above. However, *bylo* + main verb can also take an inanimate subject, especially if the subject designates a phenomenon or entity that is in some sense connected with intentionality:

(20) Russian
Delo bylo pošlo,
matter be. 3SG.PAST.NEUT start.going. 3SG.PAST.NEUT
no potom zagloxlo.
but afterwards faded.away. 3SG.PAST.
'The (whole) affair was just about to start/get going but (then) it fizzled out.'

(21) Russian
Mašina bylo poexala, no...
car.F be. 3SG.PAST.NEUT start. 3SG.PAST.F but
'The car nearly started but...'/ 'The car was just about to start but...'

Sometimes it is even possible to use this construction with typical inanimate subjects with no particular implication of intentionality:

(22) Russian
Vaza bylo pokačnulas', no ne upala.
vase.F be. 3SG.PAST.NEUT sway. 3SG.PAST.F but not fall. 3SG.PAST.F
'The vase was just about to sway but (then) it did not fall.'

It seems that the use of the *bylo*-construction in Russian has specialized for the expression of frustrated initiation whereby the main verb must denote the beginning of a verb situation, especially if we take into account the unacceptability of the example in (23), where the main verb *upala* 'fall' does not inherently involve beginning of a verb situation:[22]

(23) Russian
**Vaza bylo upala, no...*
vase be.3SG.PAST.NEUT fall.3SG.PAST.F but
'The vase nearly fell but...'/ 'The vase was just about to fall but...'

Notice that a study of the entire scope of usage of the construction indicates that this is far from being the whole story; as will be shown in Section 4 below, the same construction has taken over two more functions.

Another example of the frustrated initiation category comes from the Amazonian language Pirahã, where Everett 1986 distinguishes between what he calls two "frustrative" markers, one expressing 'frustrated initiation" *–ábagaí* (1986: 300), and the other "frustrated termination" *–ábai* encoding actions begun but not completed (Everett 1986: 300). In other words, according to Everett 1986 there is a formal way to distinguish in Pirahã between the statement *The child almost began to fall* and *The child almost fell.*

While we assume that aspectual distinctions – as much as they are encoded in individual languages – are relevant to frustrated initiation, at this stage of research we have

[22] As Andrej Mal'chukov (p.c.) points out to us, achievement verbs like the verb *upast'* do not (always) have imperfective aspect.

no conclusive evidence as to how exactly aspect relates to this category. Therefore, this is certainly an issue in need of further investigation.

3.4 Frustrated completion

The frustrated completion structure is about a past verb situation which just like with the apprehensional, the avertive, and the frustrated initiation structures was potentially realizable and yet remained unrealized. The difference is that with frustrated completion the verb situation had begun, but it could not be completed. In other words, there was an attempt to bring an initiated verb situation to an end, but this attempt was unsuccessful. We can represent the semantics of this structure as shown in Table 4:

Table 4. Frustrated completion
(i) Non-realized completion of verb situation
(ii) Pastness
(iii) Imperfectivity of prefinal stage

For instance, the Matses suffix *-uid* can refer to an action that was not finished, or an action that was not finished and additionally was expected to have a different outcome (Mueller 2013: 106–107):

(24a) Matses

cun	*tied*	*neshca-*	*uid-*	*o-*	*mbi*
1GEN	swidden	weed-	INCP.FRUST-PST-		1SG

'I started weeding my swidden but did not quite finish.' (Panoan; Fleck 2003: 362)

(24b) Matses

Shectename	*cues-*	*uid-*	*o-*	*mbi*
white.lipped.peccary	kill-	INCP.FRUST-	PAST-	1SG

'I ineffectively tried to kill a peccary.' [i.e. wounded it, but it escaped] (Panoan; Fleck 2003: 362)

Mongsen Ao – spoken in Nagaland, Northeast India, a Tibeto-Burman/Sino-Tibetan[23] language unrelated to Matses both genetically and geographically – exhibits the category of frustrated completion, too : the suffix - *phət* in Mongsen Ao is used to mark a "failure to do something to its completion" or to do something ineffectually (Coupe 2007: 330-332):

(25) Mongsen Ao (Coupe 2007: 332)

pa aki tʃhàphətəɹ li.

pa	*a-ki*	*tʃhà-phət-əɹ*	*li*
3SG	NRL-house	make-FRUS-SEQ	stay.PST

'He didn't finish building the house and left it in that state.'

Frustrated completion is often expressed by a bi-clausal structure involving the adversative conjunction *but* and the negative particle *no/not*[24]. What is foregrounded here is

[23] The precise genetic relationship of Ao to Tibeto-Burman/Sino-Tibetan is unknown (Alexander Coupe, p.c.)

[24] Notice that once we have to deal with bi-clausal structures we are into the domain of morphosyntax and not in a domain that can be dealt with solely at the level of morphology/morphosemantics.

the imperfective nature of the verb situation. This is often reflected also in the morphosyntax of the structure. On the one hand, it may only allow for the choice of a verb in the imperfective aspect in those languages which have obligatory aspectual marking:

(26) Russian

On	*ubeždal*	*menja, no*	*ne*	*ubedil.*	
he-	convince.IMPFV.PAST	me	but	not	convince.PFV.PAST

'He tried to convince me, but he didn't.'

The imperfectivity of the verb in the first clause may be enhanced by the use of a temporal adverbial meaning "a long time":

(27) Russian

On	*dolgo*	*ugovarival*	*menja, no*	*ne*	*ugovoril.*	
he	long	persuade.IMPFV.PAST	me	but	NEG	persuade.PFV.PAST

'He persuaded (Ipfv.) me for a long time, but didn't persuade (Pfv.) me.' (Comrie 1976:19)

On the other hand, it may involve a reduplication of the verb in the main clause:[25]

(28) Russian

Sneg	*tajal,*	*tajal,*	
Snow	melt.IMPFV.PAST	melt.IMPFV.PAST	
no	*ne*	*rastajal*.	
but	NEG	melt.PFV.PAST	

'The snow started to melt but did not melt away completely.'

3.5 Inconsequential

The inconsequential encodes the lowest degree possible of verb situation non-realization, namely it is about the lack – or the lack of completeness, or stability – of the expected, or wished-for results/consequences – of a verb situation that has itself been realized in the past. In other words, its meaning is 'past verb situation that has taken place in vain'.

Table 5 summarizes the semantics of the inconsequential structure broken down into meaning components:

Table 5. Inconsequential

(i) Non-realized expected result of verb situation
(ii) Pastness

Thus in Hua (a Papua New Guinea language) the grammaticalized inconsequential structure has been identified as a specific verb form. It is marked by an affix – *mana- (-ma-)* – expressing a cluster of the meaning components of pastness (temporal), completion (aspectual) and non-realization of expected result (modal):

(29) Hua

[25] We are grateful to Claude Hagège (p.c.) for having drawn our attention to this structure.

hako- *mana-* *(o)*[26]
seek- 1SG.ICSQ- (CLAM.VOC)
'I sought (but couldn't find)!'/'I looked (in vain)!' (Haiman 1988: 53)

Haiman 1980 makes it clear that the Hua Inconsequential clause may stand alone (see the example above); when this happens, it very often signals a following indicative outlining the nature of the failure:

(30) Hua
Ke- *hu-* *mana.* *(Kmivaro'* *a'bre)*
talk- do.1SG- ICSQ
'I talked to him: (but he didn't listen to me.)' (Haiman 1980: 158)

The inconsequential seems to be a highly grammaticalized structure in Amazonian languages, where it has been often referred to by the term "(canonical) frustrative". Thus the Inconsequential in Ese'eja is marked by the suffix *–axa* (the "–'axa FRUSTrative" in Vuillermet's 2013a terminology):

(31) Ese'eja
Majoya *eyaa* *oya* *ekue=* *baa=* *a*
then 1SG.ERG 3ABS 1SG.GEN= machete= INSTR
sapa- *[haha-weja-* *hia-* 'aja- *nahe.*
head- [cut-open]- DEPR- ICSQ- PAST
'Then I tried to violently cut its head off with my machete.' (but the action did not have the expected result, Marine Vuillermet, p.c.).

Vuillermet (2012: 492) makes it clear that the action denoted by the main verb "cut-open" remained without the desired consequences: the viper whose head had been cut-open actually "walked away''. In other words, the above example would be better translated as 'Then I tried to violently kill it by cutting its head off with my machete.' The verb situation denoted by the main verb was realized, but the expected result was not obtained; hence, we are dealing with the Ese´eja Inconsequential here.

Another example comes from Desano (an Arawak language spoken in Latin America) :

(32) Desano
bãkã-ge *eha-ri-bɨ*
town-LOC arrive-FRUST-NON3.PAST
'I arrived at the town (but I didn't accomplish what I went there for).' (Miller 1999: 83)

Typically, the inconsequential involves expectations towards the realization of a certain result. This expected but unrealized result is inferred from the context (see also the discussion above on the Hua Inconsequential). Thus the suffix *–bi* (termed "frustrative" in Jensen 1998) in the example from Tupinambá below indicates that the speaker expected a

[26] Here *-(o)* stands for the clamative vocable, which appears sometimes after imperatives, and proper names or kin terms in the vocative, and which is optional after the inconsequential (for further details on the use of this suffix, the reader is referred to Haiman 1980).

certain result to follow from the verb situation expressed by *só* 'go' but this result was absent after the verb situation was realized:

(33) Tupinambá (Tupí-Guaraní)
a-só-bi
1SG-go-FRUST
'I went, but didn't accomplish anything.' (Jensen 1998: 539)

The inconsequential may also be about an incomplete – or unstable – result of a verb situation that has taken place in the past. Russian has a specialized way of marking the inconsequential of incomplete result:[27] it uses the Aktionsart prefix *do-* in its meaning 'to complete' with the negative particle *ne-* preceding it within the boundaries of the same word form,[28] in order to mark the incomplete result of a past verb situation:

(34) Russian
Mne kažetsja, včera on čto-to nedogovoril(=ne-do-govoril).
to.me seems yesterday he something NEG-AKTIONSART-speak.PAST
'It seems to me, yesterday he didn't make his point completely.'/ 'It seems to me, yesterday he wasn't explicit enough about he said.' (Plungian 2001: 58)

In other words, Russian verbs can appear with what grammatical tradition considers to be a complex prefix – *nedo-*.[29] The first element of this prefix is formally similar to the negative particle *ne* in the language. The situation in Russian is very interesting because the language makes a subtle formal distinction between the inconsequential and frustrated completion. Thus the negative particle *ne* can appear in front of verbs prefixed with the Aktionsart prefix *do-* meaning `to complete'. The two cases are distinguished in the orthography and are associated with different semantic interpretations. On the one hand, the Russian Inconsequential is marked by the complex prefix *nedo-* and has the meaning 'incomplete result of a past verb situation' (see the example above). On the other hand, if the negative particle *ne* is added to a verb prefixed with *do-*, signaled in writing by the fact that it is then spelled separately, then we are dealing with the Russian Frustrated completion structure, the meaning being 'non-completed verb situation':

(35) Russian (Plungian 2001: 58):
On ne dogovoril (=do-govoril) i
he NEG AKTIONSART-speak.PAST and
pospešno vyšel ("prerval razgovor")
suddenly/abruptly went.out
'He could not/did not complete what he wanted to say and suddenly left.'

Chumakina 2013 describes a highly intriguing periphrastic verb structure – which she terms the "inertial" – in Archi, which partially overlaps with the inconsequential. The inertial stands for an event which had a result (and in fact, this result persists longer than expected), however, it also means that some change of state was expected but did not

[27] Notice that there are other expressions for the same function, even though they are not the dedicated means for expressing the Inconsequential.

[28] Notice that in the canonical case in Russian, the negative particle *ne* is used separately from the verb form.

[29] This is reflected, for example, in the fact that dictionaries like the Ožegov dictionary have entries for this complex prefix and distinguish it from the combination of negative *ne* with the prefix *do*.

happen. Since at this stage of research we have no clear understanding as to how exactly the inertial relates to the inconsequential, the reader is referred to Chumakina 2013 for details.

Finally, some languages appear to have developed two distinct structures encoding the inconsequential function. Thus in Yanomama we find the affix *pë,* which can be translated by 'vainly' in (36):

(36) Yanomama

ware	*ya-*	*a*	*nia-*	pë-	*ta-*
peccary	1SG(A)	3SG(P)	shot.arrow-	ICSQ-	PUNCT-

ke-	*ma*
PFV2-	PAST

'I shot the peccary (but not lethally)'/'I ineffectively tried to kill a peccary [i.e. I wounded it but it escaped].' (Ferreira 2015)

In addition to this morpheme there is yet another inconsequential structure – consisting of the verbal particle *ni* followed by the morpheme *õhõtaa* 'suffer' – which gets added to the main verb:

(37) Yanomama

ya-	*rãma*	*hu-*	*u*	ni-	õhõtaa-	*a-*	*ma*
1SG(S)-	to.hunt	to.go-	DYN	V.PTCL-	to.suffer-	IPFV-	PAST

'I went hunting (but I did not kill anything).' (Lit.: 'I-suffered-hunting') (Ferreira 2015)

4 Linguistic categorization

4.1. Grammatical polysemies and abstract semantic prototypes/ semantic "cores"

Of the grammatical categories discussed above it is only the apprehensional that is relatively well-studied and non-controversial (Austin 1981, Dixon 1980, Epps 2008, Lichtenberk 1995, Vuillermet 2012, Vuillermet forthc., Angelo and Schultze-Berndt 2016, among others). The other four categories have – most of the time – not been given any recognition as grammatical categories in their own right. The reason for that is, we hypothesize, the existence – in a number of languages – of a one-to-many mapping between form and functions of the structures under discussion here, a situation to which we may refer as grammatical polysemy (or heterosemy). Thus Epps 2008 reports for Hup (a language of the Nadahup (Maku) family, in the Vaupés region of the Amazon rain forest) the existence of what she calls a "frustrative mood" marker which illustrates this point. According to Epps 2008, the frustrative in Hup is encoded by the inner suffix *-yæ̃h-* on verbs and a particle *yæ̃́h* on verbs and predicate nominals. It has the following functions, which correspond to our inconsequential, frustrated completion and avertive structures, respectively:

(i) Action which occurred but was ineffectual/ the intended or anticipated goal of the action is unrealized/ its resulting (intended) state did not last, or its eventual outcome is in doubt (i.e. the inconsequential in our terminology):

(38) Hup

tɨt	*w'ăt-ə́t*	*ʔãh*	*cuh-ʔeʔ-*yǽh*-æ̃́h*
string	long-OBL	1SG	string-PERF-FRUST-DECL

'I strung (the beads) on a long string (in vain).' (Epps, 2008: 620)

(ii) The action itself did not reach completion (i.e. frustrated completion in our terminology);

(iii) (When the frustrative particle *yǣ́h* is used with the verbal negative suffix *-nɨ́h*). An averted negative event:[30]

(39) Hup (Epps, 2008: 618)

ʔãh wɨdham-nɨ́h	yǣ́h*(...)*
1SG arrive.go-NEG	FRUST

ˊI almost didn't arrive(…)'

The *bylo*-construction in Russian mentioned above can also be regarded as a structure that presents a case of grammatical polysemy/heterosemy. Plungian 2001 and Malchukov 2004 are two excellent studies of this construction from which it becomes clear that it can encode any of the following semantically elaborate categories:

a) frustrated initiation

(40) Russian

Pošjol	*bylo*	*k*	*domu,*
start.walking.PAST	be.3SG.PAST.NEUT	towards	home
no	*ostanovilsja.*		
but	stopped		

'I was about to start on my way home, but (then) I stopped.' (Plungian 2001: 74)

b) inconsequential

(41) Russian

pojavilsja	*bylo*	*v*	*dome,*
appeared	be.3SG.PAST.NEUT	in	home
no	*tut-že*	*snova*	*izčez.*
but	right.away	again	disappeared

'I appeared at home just for a moment, but disappeared again right away.' (Plungian 2001: 74)

c) avertive[31]

(42) Russian

Zadal	*bylo*	*vopros,*	*no*	*zastesnjalsja.*
give.PAST	be.3SG.PAST.NEUT	question	but	became.shy

'I nearly asked a question, but I was too shy for that.' (Plungian 2001: 74)

Which of these functions will be realized by any particular occurrence of the *bylo*-construction depends on the particular aspectual characteristics of the main verb.

Notice, however, that when it comes to describing the behavior of the above concrete linguistic expressions on a language-specific level, an analysis in terms of grammatical polysemy is not the only possibility. An alternative analysis would be one in terms of monosemy, or underspecified grammatical category (with thanks to an anonymous reviewer). Such an analysis involves the notion of abstract semantic prototype or "core" semantics, whereby it is assumed that the boundaries between the functions/uses of the

[30] Notice that Epps (2008: 621) reports one more function for the frustrative particle *yǣ́h* when used with the verbal negative suffix *-nɨ́h,* namely it may indicate that "a negative event has impeded a desired outcome or situation (i.e., 'did not do (verb), to our disappointment')".

[31] Plungian (2001: 74) refers to this function of the *bylo*-construction as "unrealized intention" (Russian: *nerealizovannoe namerenie*).

grammatical morpheme concerned are fuzzy and blurred. Thus it is often the case that following the logic of "common denominator", various attempts have been made to postulate an abstract semantic prototype to capture a varying number of the structures under discussion here. There exist a number of systematic accounts of the form:meaning pairings which constitute the object of the present investigation (Aikhenvald 2003, Epps 2007, Malchukov 2004, Plungian 2001, Overall 2017). For lack of space, in this section we can only discuss – in a rather synthetic way – some of them (for details, see the original studies).

One of the most comprehensive treatments of the above distinctions in terms of a single abstract prototype is presented in Aikhenvald 2003. On the basis of a detailed analysis of the linguistic facts of the Amazonian language Tariana, Aikhenvald treats a number of structures as the concrete linguistic realizations of a single, frustrative core meaning, that is, "the action was 'frustrated'" in some way. More precisely, Aikhenvald (2003: 380) describes the morpheme *-tha* in Tariana as the expression of no fewer than the following meanings depending on the con- and the co-text of use of that morpheme :

(i) *The action has failed already*.
(ii) *The action is bound to fail*.
(iii) *The success of an attempted action is not yet certain*.

Of these three, the distinction in (i) comes close to our avertive, and the one in (iii) is close to our frustrated completion. The distinction in (ii) is a very interesting observation; since at this stage of research we have no conclusive data about the existence of a form:meaning pairing encoding the same meaning in any other language, we will leave it for consideration in further research..

While describing (any number of) the semantically elaborate categories under discussion here in terms of abstract semantic prototypes/semantic "cores" on a language-specific level may be justifiable, such a treatment of these categories on the universal conceptual-semantic level – we argue – deprives us from important typological insights. There is nothing to be gained from cross-linguistic accountsleveling up the differences between two verb situations that are totally opposite in temporal-aspectual-modal nature such as a fully realized one versus a fully non-realized one. This has become the common practice in the typological literature on South American languages, in particular, where the umbrella term "frustrative" has been used for non-realized TAM categories almost on an "anything goes" principle. This is how a detailed recent study of tense, aspect, modality and evidentiality in indigenous South American languages describes the "frustrative" (Mueller 2013: 158): "A frustrative refers to an event that did not have the expected outcome or was finished unsuccessfully. The action can be left unfinished, or be finished but not as expected, or be done in vain. It involves emotive frustration on the part of the speaker, but not necessarily so. It is not an incompletive, which just states that an action is not finished, regardless of whether the outcome was expected or desired. One could say that semantically a frustrative marker can be an incompletive with added frustration in those cases where the action is not finished, but this is only a part of frustrative meaning. Actions may very well be finished, which prohibits incompletive meaning, but not with the desired outcome."

The "frustrative" as described in Mueller (2013: 158) covers – in our model – two distinct semantically elaborate grammatical categories, frustrated completion and the inconsequential, which occupy two adjacent places on our non-realization *apprehensional-avertive-frustrated initiation-frustrated completion-inconsequential* continuum (Fig. 1). In other words, whereas the abstract semantic prototype model may serve as a possible description of the behavior of the linguistic expressions under discussion on a language-

specific level, this model is too vague to help us further if we are carrying out a typological comparative study.

The question then arises:

given that in individual languages the above grammatical polysemies – or monosemous, underspecified grammatical categories, for that matter (see the discussion below) – exist, is it justifiable to treat the avertive, frustrated initiation, frustrated completion and the inconsequential as distinct categories in the first place?

Our answer to this question is in the positive, for the following reasons. First, it is possible to find clear-cut formal oppositions between particular TAM non-realization semantically elaborate categories within the system of a single language such as, for instance, the formal distinction in the orthography between Frustrated completion and the Inconsequential in Russian (see Section 3.5 above). An example of a formal distinction between Frustrated completion and Frustrated initiation comes from Pirahã. Thus in (43), in which the Frustrated completion marker (referred to as "frustrated termination marker" in Everett 1986) is attached to the verb, the speaker "perceives the child as beginning to fall but catching himself before hitting the ground" (1986: 300):

(43) Pirahã

Tiobáhai	*bigí*	*kaob* – ábai
Child	ground	fall-FRUST.TERM

'The child almost fell.' (Everett, 1986: 300)

However, if we exchange the Frustrated completion marker *–ábai* with the Frustrated initiation marker *–ábagaí* the meaning of the sentence will change:

(44) Pirahã

hi	*xi*	*koho-*	*áo-*	*b-*	ábagaí
3	thing	eat-	TELIC-	PERF-	FRUST.INIT

'He almost (began to) eat it.' (Everett, 1986: 300)

Tariana is a language which makes a formal distinction between the Avertive and the Inconsequential. More precisely, in Tariana it is possible to employ a distinct affix, namely *–mañа* (or *–mayã*) to 'describe an action which was about to happen, but did not happen'. Aikhenvald 2003 even adds an evaluative aspect to the meaning: "Its meaning is 'something negative almost happened but the agent (A/Sa) managed to prevent it'" (Aikhenvald 2003: 342). This is a typical context of use for the avertive:[32]

(45) Tariana

ha-na-nuku	*nu-whe-ta-* mayã	*nhupa-ka*
this-CL:VERT-TOP.NON.A/S	1SG-fall+CAUS2-ALMOST	1SG+grab-DECL

'I was on the verge of dropping this long one (pen) but managed to grab it.'
(Aikhenvald 2003: 342)

On the other hand, there exists what Aikhenvald refers to as the frustrative marker *–tha-* which is often – even though not always – used to indicate "that the success of an attempted action is not yet certain" (Aikhenvald, 2003: 380), i.e. the inconsequential in our terminology.

[32] Notice that Tariana (Aikhenvald 2003: 342), can also express avertive meaning by the frustrative marker *–tha-* plus 'almost' particle.

(46) Tariana

Nuha	*[nu-sata*-tha-*na*	*nhuma]*
I	1SG-ask-FRUST-REM.P.VIS	1SG+hear

'I did try in vain to ask (the pilot about why he did not let us go).' (Aikhenvald 2003: 380)

Whereas *–mañ̃a* (or *–mayã*) is categorized as an aspect marker, the frustrative marker *–tha-* is classified in Aikhenvald 2003 as a mood and modality marker.

Second, when examined in greater detail, many situations of what at first sight seem to be grammatical polysemies involving the categories under discussion here turn out to involve different constructions where the same, "polysemous" grammatical morpheme is used in a specific grammatical environment. Let us compare the use of the frustrative marker *–tha-* in the above example in Tariana to the use of the same marker in examples (47) and (48), where the meaning is Avertive:

(47) Tariana

Tuki-tha*mana*	*wa-yami*
little-FRUST+REM.P.NONVIS	1PL-die

'We almost died.' (Aikhenvald 2003: 382)

(48) Tariana

Kwame-tiki	*nu-wha*-tha-*mahka*	*nu-a*
little.by.little-DIM	1SG-fall-FRUST-REC.P.NONVIS	1SG-go

'I have almost fallen down (but I managed not to).' (Aikhenvald, 2003: 382)

At first sight, one may be inclined to regard the *–tha-* morpheme as manifesting grammatical polysemy (Inconsequential/Avertive). A closer examination of the grammatical distribution of this morpheme reveals, however, the following regularity:

a) When used in combination with visual evidentials, *–tha-* marks the Inconsequential;
b) When used in combination with non-visual evidentials and the adverb *tuke* 'a little', or *kwame-tiki* 'little by little-diminutive', it means 'just about, almost', marking an action which was on the verge of happening but didn't (cf. Aikhenvald 2003: 381), i.e. the Avertive.

In other words, it isn't *–tha-* that conveys the inconsequential or avertive meanings, but its use as part of a whole construction with or without the adverb 'a little', and with the visual vs. non-visual evidentials. Thus, it is justifiable - we argue - to treat these two constructions as the instantiations of two distinct grammatical categories.

4.2. The present approach: Intersective Gradience and semantically elaborate categories

In the present section we will argue that the notion of precise, sharp boundaries is critical/crucial to a phenomenon such as semantically elaborate grammatical categories. We will offer an account of this type of categories based on what is termed "Intersective Gradience" in Aarts 2004 and Aarts 2007.

Aarts' approach to linguistic categorization is an integrative one: it takes a position between the views of the so-called 'categorizationalists' (advocating precise, sharp Aristotelian categories) and those holding the view that 'gradience is everywhere'.

Intersective Gradience is conceptualized as involving "two form class categories α and β, and obtains where there exists a set γ of elements characterized by a subset of α-like properties and a subset of β-like properties. When there is gradience between two categories

α and β we will say that these classes 'converge' by virtue of the fact that there exist elements which display properties of both categories". Also: "The intersection is between γ and the full set of α-like properties, and between γ and the full set of β-like properties." (Aarts 2007: 124). As an example Aarts gives the phrase *a working mother* in which *working* is characterized by a mix of verbal and adjectival properties. For example, it is verbal by virtue of taking an *-ing* ending and by its ability to be premodified by an adverb such as *hard*, but at the same time it displays the adjectival property of being placed in front of a noun. Crucially to our analysis, Aarts' model of Intersective Gradience rules out fluid category boundaries; rather, there is a clear demarcation line between categories. Thus a particular formative may have properties of one or two categories but the borders of the categories are still clear. Notice that the present model in terms of Intersective Gradience has an important characteristic in common with a model in terms of Transcategorization (Ramat 2001, Ježek & Ramat 2009): both models recognize the possibility for grammatical categories to share identical values (e.g. genus in verbs and nouns) as well as the possibility for the same linguistic expression to belong to more than one category. Where they differ – in a major way – is that whereas the former allows for a clear demarcation line between categories, the latter does not. In other words, both models recognize gradience, but the Intersective Model retains discreteness whereas the Transcategorization Model does not.

What makes an account in terms of Intersective Gradience an adequate way to capture the characteristics of the TAM semantically elaborate categories under discussion here is the fact that these categories are notionally related to each other and that they share a varying number of characteristics, i.e. meaning components, and yet, they are cross-linguistically identifiable as categories in their own right.

Thus our account of semantically elaborate categories based on the notion of Intersective Gradience is an extension of the way in which this notion was elaborated in Aarts 2004 and Aarts 2007 in two ways. Whereas Aarts' work fleshes out Intersective Gradience primarily on the basis of syntactic phenomena/criteria, in the present study we rely on semantic criteria as much as we do on morphosyntactic ones. This comes as no surprise, since our purpose in this study is to identify – and organize within a single coherent conceptual-semantic frame – a particular set of particular (lexico-)grammatical structures across languages. Due to the vast diversity of language-specific syntactic rules, cross-linguistic comparisons without taking recourse to semantics are next to impossible, especially in cases where the languages investigated are both genetically and geographically remote.

What is most relevant to the present discussion is that even though any pair of the above semantically elaborate categories may share – or converge on, in Aarts' 2004 and Aarts' 2007 terminology – one or more meaning components, they still have sharp boundaries.

From Table 1 through Table 5 in Section 3 it becomes clear that the semantically elaborate grammatical categories discussed here select a particular number from the following set of meaning components:

- Non-realization of the verb situation as a whole
- Non-realization of the initiation of the verb situation
- Non-realization of the completion of the verb situation
- Non-realization of the expected result/resultant state of the verb situation
- Causality
- Undesirabily of verb situation
- Pastness
- Imminence

- Perfectivity
- Imperfectivity of prefinal stage

The gist of the present account is that any of the categories under discussion share a certain number of particular characteristics, but this does not make them gradually "flow" into each other. On the contrary, the boundaries between them are sharp and precise. Let us illustrate this by taking a closer look at the avertive again. In Section 3 we characterized the avertive as a cluster of 6 meaning components: *(i) non-realization of foregrounded degree of verb situation stage-by-stage development, (ii) foregrounded degree of verb situation realization: full, (iii) result degree of verb situation realization: zero, (iv) imminence, (v) pastness; (vi) perfectivity* (see Table 2). Notice that the analysis we propose of semantically elaborate categories involves an even stronger emphasis on the Aristotelian view than advocated in Aarts 2004 and Aarts 2007. Thus, for example, Aarts allows a word like *utter* in *utter fool* to be an adjective, even though it conforms only to a subset of adjectival properties. The parallel question that would legitimately arise in the present study is then: Do we allow, for example, an avertive for which fewer than the four components in Table 2 apply? Our answer to this question is in the negative: if the semantics of an elaborate grammatical category involves fewer or more than – or the same number but different from – the above components , it is then a different category. Thus if a grammatical category only involves *pastness*, and *perfectivity* , but not *non-realization of the verb situation as a whole* and *imminence*, it is then another category, namely the aorist.

Let's assume that a grammatical category converges on only one of the avertive defining characteristics, e.g. *pastness*. If that category has additional characteristics which are different from the ones of the avertive – e.g. *non-realized completion of the verb situation* (instead of *non-realized verb situation as a whole*), and *imperfectivity of prefinal stage* (instead of 'perfectivity'), then – again – it is a different grammatical category, namely frustrated completion.

5 Discussion

In the previous sections we looked in particular at meaning:form pairings that express different degrees of realization of the verb situation (thus our investigation is in the conceptual-semantic space of Tense-Aspect-Mood), ranging from a verb situation which was frustrated in its entirety, to a verb situation where the event designated by the verb happened, but some expectation raised by the event was not met. The form:meaning pairings we look at share this meaning of non-realization, but in addition contain various semantic components like pastness, imminence, perfectivity. As a result of our cross-linguistic investigation, we proposed and defined in detail five categories, namely the apprehensional, the avertive, frustrated initiation, frustrated completion and the inconsequential. To map these categories precisely we looked at data from a range of languages – both languages that are related to each other and ones that are not – in what can be referred to as universal conceptual-semantic space[33]. As is to be expected when working with diverse languages, we came across varying formal means of expressing the above semantically elaborate categories, depending on the morphological profile of the individual languages. The clearest manifestations of the categories under discussion came from languages where there exist

[33] Notice that – as an anonymous reviewer correctly points out to us – there actually are three levels of analysis here and two interfaces between them: (i) the cross-linguistic category; (ii) the language-specific category, which is a member; (iii) the individual occurrences of the language-specific category. It is on the first of these three levels that we can place the *apprehensional-avertive-frustrated initiation-frustrated completion-inconsequential* continuum in Fig. 1.

specific, morphosyntactically dedicated, highly-grammaticalized verb forms for them (e.g. the Matses suffix *–uid* for the Matses Frustrated completion, or the affix *–mana-* (*-ma-*) for the Inconsequential in Hua). In other languages we came across less-grammaticalized, i.e. lexico-grammatical rather than grammatical linguistic expressions for the apprehensional, the avertive, frustrated initiation, frustrated completion and the inconsequential. In these languages we observe – as a rule – either auxiliary constructions and/or bi-clausal structures, where the semantics of the main verb can play a role for the overall interpretation of the structure. In all cases, however, we are dealing with linguistic expressions that have moved away from their initial, lexical status. In other words, for the purposes of this study, we left out of consideration lexical expressions, and only examined grammatical as well as grammaticalizing sructures (cf. Heine and Kuteva 2002 regarding the diagnostic tools for identifying grammaticalized/grammaticalizing structures).

The form:meaning pairings we reviewed here present a challenge exactly because of their complex semantics. They frequently remain unrecognized in the study of languages where they occur. We consider it important to recognize that the form:meaning pairings we reviewed should be defined as belonging to grammatical categories which may share some meaning components, but retain distinct and well-defined boundaries. Thus, we argue in favor of a categorization which recognizes gradience, but retains discreteness. Seeing the categories we discussed in the paper as discrete is justified because they can have distinct formal expression across languages as well as within the same language.

It is no less important to recognize that the categories discussed here – like all semantically elaborate grammatical categories – are not to be confused with grammatical polysemies: a grammatically polysemous category involves more than one grammatical meaning, whereby in a particular type of context only one of them is realized; in the case of a semantically elaborate grammatical category, on the other hand, all meaning components are realized simultaneously in every particular type of context. This does not mean that semantically elaborate grammatical categories are incompatible with grammatical polysemies, however. Thus the individual meanings that a grammatical polysemy involves may each be cumulative, that is, elaborate in our sense, e.g. the inner suffix *-yœ̃h-* in Hup (see Section 4.1). Furtheron, a polysemous grammatical morpheme may appear in different linguistic constructions thereby realizing different grammatical categories, sematically elaborate ones included, e.g. the grammatical morpheme *–tha* in Tariana (see Section 4.1). One might well be tempted to challenge the present analysis by raising the question: how do we know that we are dealing with convetionalized features of meaning/grammatical structures and not with pragmatic implicatures of particular, non-grammatical(ized) linguistic expressions? For instance, as Alexandrova 2016 points out in a most recent study on narrowly averted and partially completed events in the languages of Europe and beyond, it is well-known – ever since Dowty 1979 – that when used with telic predicates in the past, one and the same linguistic form (e.g. Engl. *almost*) can be interpreted as meaning either that (a) the event was on the verge of occurring but it did not; or that (b) the event was partially realized but its endpoint was not reached. Accomplishments ([+durative], [+telic]) are generally compatible with both, while achievements ([-durative], [+telic]) accept only (a). A language which neatly manifests this situation is English, since it lacks specialized linguistic expressions for (a) and (b). Then the question arises: on what grounds do we treat (a) and (b) as two distinct categories? Our justification for the present analysis comes from the fact that – unlike English – there are languages that do not collapse (a) and (b) into the same structure, cf. example (42) for the Avertive and example (28) above for Frustrated completion in Russian. Alexandrova 2016 points out further languages which – just like Russian – encode (a) and (b) separately, Lithuanian, Buryat, Tyvan, among others.

An anonymous reviewer observes that it is possible to use the English adverb *almost* as a modifier of past perfective VPs in four different types of context, which results in expressing avertive, frustrated initiation, frustrated completion, and inconsequential meaning, respectively:

"(a) Avertive: ***I almost cleaned the house.*** *I hate cleaning the house. But I hate boredom even more. Fortunately, your proposal to go have coffee saved me.*

(b) Frustrated initiation: ***I almost cleaned the house.*** *But you came to get me to go have coffee with you just as I was about to start.*

(c) Frustrated completion: ***I almost cleaned the house.*** *When you came to get me to go have coffee with you I had already gotten down to the last room.*

(d) Inconsequential: ***I almost cleaned the house.*** *I dusted and vacuumed for hours and hours but no matter how much I had at it, the place just looks grimy."*

The question then arises: should we treat the behavior of the English construction *almost* + perfective VP as a manifestation of a grammatical polysemy with the semantically elaborate grammatical categories Avertive, Frustrated initiation, Frustrated completion and Inconsequential as its distinct meanings, or as "some sort of underspecified super-category", or simply as a structure which "encodes proximity to a reference point on some appropriate scale, as in *It's almost noon* or *She's almost three* or *It costs almost a million bucks"* (with thanks to the same anonymous reviewer). We agree with the anonymous reviewer that in order to give a conclusive answer to this question – which relates to the language-specific level of analysis – one needs to perform polysemy vs. vagueness/underspecification tests of the kind discussed in Cruse 1986. Applying the substitution, the identity, the establishment of senses as well as the sense spectra tests (for details, see Cruse 1986: 58-74) we conclude that the *almost + perfective VP* construction in English is a monosemous, underspecified linguistic expression rather than a polysemous one. A detailed analysis of the way this construction is used in English remains outside the scope of interest in this study, however, because this construction is lexical rather than grammatical (or lexico-grammatical) in English, in the first place (the reader is referred to Kuteva et al. 2019 for the diagnostic tools used in identifying grammatical structures). Second, the reader is reminded of the fact that our proposal for the existence of a synchronic continuum *apprehensional-avertive-frustrated initiation-frustrated completion-inconsequential* in Fig. 1 relates to a level of analysis which is not language-specific but a cross-linguistic one within what can be regarded a universal conceptual-semantic space.[34]

6. Conclusion

In this paper we studied five non-realization TAM semantically elaborate grammatical categories – the apprehensional, avertive, frustrated initiation, frustrated completion, and inconsequential – that we have been able to identify across languages. In order to show the non-realization meaning component one needs to break down the semantics of an event into stages such as intiation and completion, a procedure firmly established in the literature on the internal structure of verb situations. The classification we propose here – that is, the

[34] This, however, does not mean that the five categories under discussion here have to be grammaticalized in all languages.

synchronic non-realization continuum apprehensional-avertive-frustrated initiation-frustrated completion-inconsequential (Fig. 1) – does, indeed, take the break down of the internal structure of the verb situation as a starting point. But it goes beyond that. What it does in addition is: it makes us "take a step back", viewing the whole picture, with the verb situation on the "canvas of time", whereby the verb situation is conceptualized as a temporal stretch placed on the time axis, and the vantage point of the viewer changes from the (i) pre-initial phase to the (ii) imminently pre-initial phase to the (iii) initial phase to the (iv) completion phase and, finally, to the (v) after-final phase of that verb situation.

We argued that the Intersective Gradience approach to linguistic categorization is particularly good at dealing with the categories under discussion here. The apprehensional, avertive, frustrated initiation, frustrated completion, and inconsequential encode more than one meaning components belonging to different semantic domains simultaneously. We show that the application of the Intersective Gradience approach adequately captures their nature: (i) the semantics of these categories encompasses a particular number of particular meaning components (i.e. they have discrete boundaries), and (ii) these elaborate categories are composed of a number of discrete meaning components that they may partially share with other, different categories. It is this fact that gives a superficial impression of fuzziness . There is, however, a caveat here. It is not always easy to determine if a particular grammatical category is semantically elaborate or semantically straightforward, and this is not surprising: there exists no consensus among linguists about (a) what "meaning" is, in the first place, and; (b) whether it is justifiable to keep pragmatics separate from semantics. Hence it is only to be expected that measuring the semantic elaborateness of a particular linguistic expression – be it lexical or grammatical – would be a challenging task[35]. It is beyond the scope of this paper to study the different types of situations that can be observed when trying to compare grammatical categories with respect to their elaborateness (for a detailed discussion on this, the reader is referred to Kuteva 2009). For the purposes of the present study, however, it is instructive to point out that there exists at least one type of situation where the semantic elaborateness of grammatical categories can be measured in a principled way: When the semantics of one grammatical category encompasses/ includes the semantics of another grammatical category. Thus, the avertive is more elaborate than the past since the meaning of the former (involving pastness, imminence, non-realization) includes the meaning of the latter in its primary, deictic function (pastness). While at this stage of research we have only made use of strictly linguistic metrics for measuring elaborateness of grammatical categories, future research may well show that disciplines such as psycholinguistics are better equipped for this task.

Abbreviations

A/Sa = agent
ABL = ablative
ANA = action narrowly averted
ABS = absolutive
ACC = accusative
AG = agentive
ALL = allative
CLAM.VOC = clamative vocable
CLC = collective

[35] We are reminded of Levinson (2000) when he says "An utterance is not, as it were a veridical model or "snapshot" of the scene it describes. Rather an utterance is just as sketchy as Rembrandt's drawing……There is no algorithm that, given a syntactic string in a language, cranks out its unique logical form or semantic structure."

CNC = concessive
CNJ = conjunction
dat = dative
DEPR = depreciative
DIM = diminutive
DlO = dual object
ELA = elative
ERG = ergative
F=feminine
FRUST=frustrative
FRUST.INIT = frustrated initiation
FRUST.TERM = frustrated termination
GEN = genitive
habit = habitual
ILL = illative
IMPF = imperfect
IMPFV = imperfective
INCP = incipient
INCP.FRUST = frustrated completion
ICSQ = inconsequential
INDF = indefinite
INF = infinitive
INS/INSTR = instrumental
ITIVE/ITV = intransitive
LOC = locative
LEST = *lest*-clause
M = masculine
MOD = modal
modal = modal affix *-á:pi-*
NEG = negative
NEUT = neuter
NOM = nominative
NMZ = nominalizer
NP = noun phrase
NPF = noun prefix
NRL = non-relational prefix
PA = past
PAST/past = past
PERF = perfect
PFV = perfective
PL/pl = plural
PlO = plural object
POSS = possessive
PRES = present
PTCL = particle
PUNCT = punctual
PST = past
PUR = purposive
REC.P.NONVIS = recent past non-visual evidential
REM.P.VIS = remote past visual evidential

RES = resultative
RPAS = remote past
s = same subject switch reference marker *–k*
SG/sg = singular
SS/ss = switch reference same subject
stats = subject of a stative verb
TAM = Tense-Aspect-Mood
TMP.OS = temporal subordinate, object-to-subject co-reference
TMP.SS = temporal subordinate, subject-to-subject co-reference
TR = transitive
V = verb
VADV = verbal adverb
VBZ = verbalizer
VP = verb phrase
3A = 3rd person Agent

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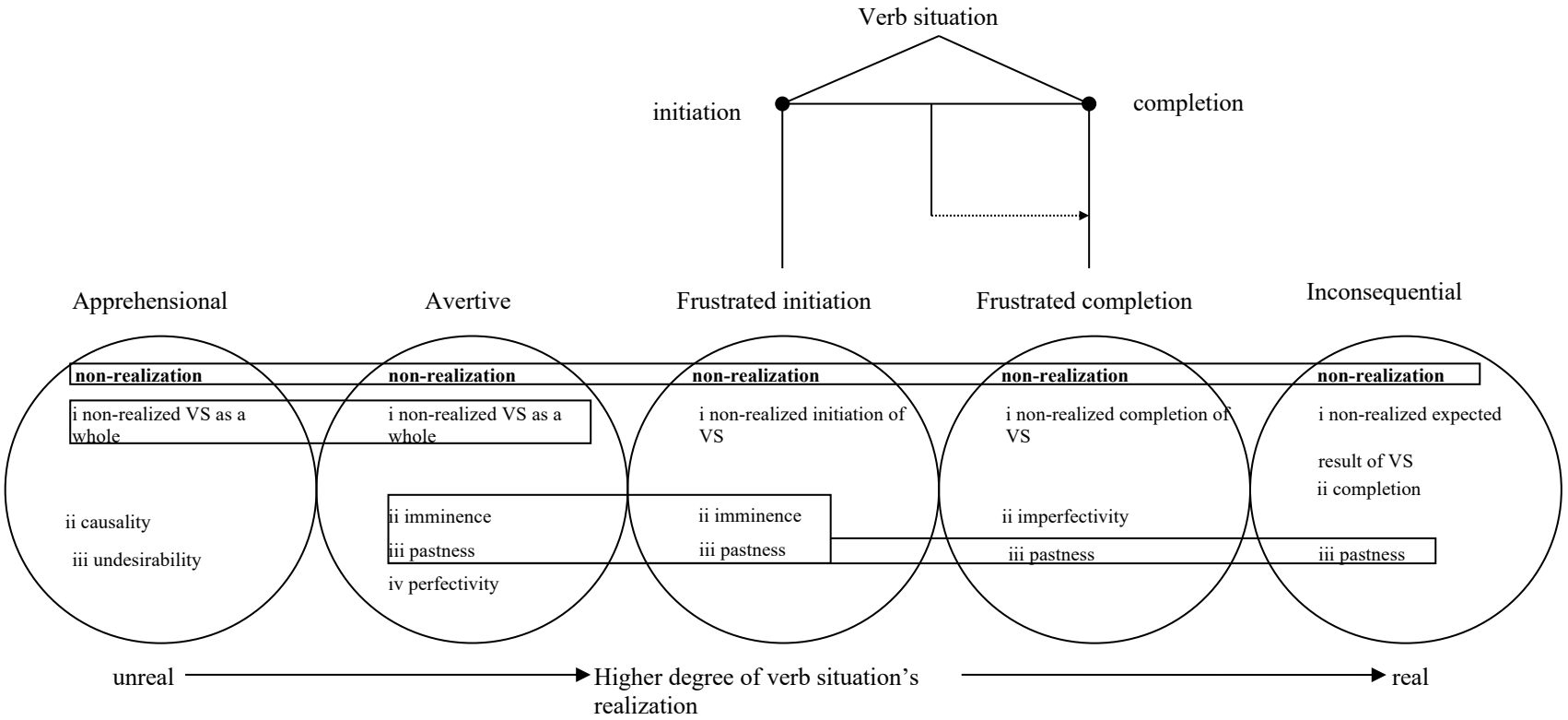
Figure 1. Conceptual-semantic space of the "grammar of non-realization"



In this representation the shared components of the various semantically elaborate categories is visualized using ´boxes´.
VS = verb situation