



HAL
open science

Avertive/frustrative markers in Australian languages: blurring the boundaries between aspectuo-temporal and modal meanings

Patrick Caudal

► **To cite this version:**

Patrick Caudal. Avertive/frustrative markers in Australian languages: blurring the boundaries between aspectuo-temporal and modal meanings. Kasia M. Jaszczolt. *Understanding Human Time*, Oxford University Press, In press. hal-03511453

HAL Id: hal-03511453

<https://hal.science/hal-03511453>

Submitted on 4 Jan 2022

HAL is a multi-disciplinary open access archive for the deposit and dissemination of scientific research documents, whether they are published or not. The documents may come from teaching and research institutions in France or abroad, or from public or private research centers.

L'archive ouverte pluridisciplinaire **HAL**, est destinée au dépôt et à la diffusion de documents scientifiques de niveau recherche, publiés ou non, émanant des établissements d'enseignement et de recherche français ou étrangers, des laboratoires publics ou privés.

Avertive/frustrative markers in Australian languages: blurring the boundaries between aspectuo-temporal and modal meanings

Patrick Caudal
University of Paris & CNRS

Draft version 06-08-2021

Do not quote

1 Introduction

This paper will be primarily concerned with what languages can tell us about the way the human mind can conceive of time, in the broadest possible sense; it is, to a large extent, a modest attempt at providing a linguist's insight into a crosslinguistically understudied category, and at drawing some conclusions for a general theory of time, at the cognitive and social level, which, I believe, are legitimate objects for a philosopher's study of temporality. Philosophically speaking, I do not intend to commit myself to a very specific view of what kind of model we should assume in order to account for the general properties of time. I will merely consider that time essentially consists of the totality of temporal relations between the events constituting the history of our world – a now fairly ancient idea pioneered by Leibniz, but also elaborated upon by Einstein, Whitehead (Whitehead 1929), and of course Russell (Russell 1936) and Wiener (Wiener 1914) – the two latter contributions being of particular importance in the formal semantic linguistic community, especially after Kamp's re-formulation of the so-called *Russel-Wiener construction* in his seminal 1979 paper (Kamp 1979). In addition to this, and following the Davidsonian tradition in formal semantics, I will assume that events are legitimate semantic referents, i.e., can constitute individuals – albeit of a slightly abstract kind – in a model theoretic semantics, or discourse referents, if one resorts to some Kamp-style discourse semantics.

Under this fairly common conception, the flow of (linguistic) time, essentially boils down to a flow of events. The vast majority of descriptive, theoretical, formal and typological works dedicated to the study of this horrendously complicated issue, tend to concentrate on descriptions of actual events – i.e., events which effectively took place, as in (1). And the temporal begins to border on the modal, when we turn our attention to events that are, or were in the process of taking place, as is the case with the English progressive, (2); these can be

only partially actual, as is well-known from (Dowty 1979)'s imperfective paradox. Several seminal theoretical accounts of the progressive resorted to evidently modal possible-world concepts to handle such forms, from (Dowty 1979)'s inertia-based theory, to (Landman 1992)'s stage-based theory. Event descriptions in the progressive have a foot in the actual world, and another foot in a yet undetermined possible future (relatively to whatever counts as the topic/reference time *à la* (Reichenbach 1947; Klein 1994)). On the other hand, counterfactuals have been unquestionably and overwhelmingly treated as purely modal forms. If one assumes a possible-world semantic analysis for modality, e.g. *à la* (Kratzer 1991), past counterfactuals such as (3) are generally taken as referring to worlds inaccessible from the actual world/time index, and to have little or no connection with 'actual' event descriptions such as (1), and even (2). Additionally, past counterfactuals are well-known for having a negative dimension of meaning as well, and (3) at least implicates that the subject did not leave the described alley; the question of the negativity of the past counterfactual/past irrealis has already attracted considerable attention, including within the Australianist tradition (Verstraete 2006; Van Linden & Verstraete 2008) and of course among formal semanticists/philosophers of language, cf. e.g. (Ippolito 2003; Ippolito 2006; Arregui 2009). Such utterances can be therefore regarded as being related to inactual events, philosophically speaking. But the simplest, clearest and most common type of utterances pointing to inactual events, are of course negative past indicative utterances such as (4). Intuitively, they might at least as remote from reality than say, past counterfactual utterances, and that a deep ontological split separates (1) from (4).

- (1) John came early this morning.
- (2) Mary was crossing the lawn.
- (3) We should have left after two years of a broken security light in the alley (...). (*The Guardian*, 2/12/2014)
- (4) Max didn't go.

This paper will focus on a hitherto relatively understudied type of event descriptions, contributed by so-called *avertive* or *frustrative* forms, which happen to be extremely common in Australian Aboriginal languages. The properties of these forms, I will claim, suggest that there is, in fact, more a continuum, than a gap, between actual (positive) and inactual/counterfactual (negative) event descriptions; I will argue that they constitute a case of hybrid positive/negative, complex event description. As a first approximation, the relevant

meaning of so-called avertive¹ and frustrative forms can be best paraphrased as ‘Subject nearly/almost V-ed/ Subject was going to V-ed [but didn’t]’, cf. (5)-(7) – as we will see, these forms tend to have other, sometimes overlapping meanings, and exhibit substantial polyfunctionality in Australian languages.

(5) Kosa K hau + re + hine (Hua)
 fall (2s.o.) happen (perf.3) (counterfactual A)
 ‘You almost fell.’ (Haiman 1980: 160)

(6) maju ngan-ambija-na (Iwaidja)
 WANT.Part 1sg.FRUST-laugh-FRUST
 ‘I was going to laugh (but I didn’t)’ (Pym & Larrimore 1979: 76)

(7) Il a voulu partir. (French)
 He have-PR.3sg want-PP leave-INF.
 ‘He tried to leave [and failed]’.

This paper will demonstrate that Australian languages abound with (often multiple) grammatical avertive patterns, making it a choice category in their grammatical inventory of meanings to describe the world, or at least a much more prominent category than is the case in say, so-called ‘Standard Average European’ (SAE languages) (in the Whorfian sense, see (Haspelmath 2001)). – at least on a par with Amazonian languages (Overall 2017). I will speculate that such typological discrepancies might be an indication that our understanding of the flow of time can be cognitively and socially far richer than suggested by theories of time informed by SAE languages. I will argue that this striking areal property of Australian languages seems to indicate that the linguistic construal of time should also be envisioned as a *socially connected structure*, rife with disappointments and failures connecting speakers and addressees, effectively driven by shared or interpersonal representations of expectations (including those of other people), plans and desires, rather than mere caudo-temporal ordering (even if it is subjectively reconstrued *via* e.g. deixis-related mechanisms), and therefore potentially overlapping with modality and evidentiality in significant ways. In other words, that time in language, and the cognitive categories underlying the perception and understanding of time in language, and from there, mediating the ability of the human mind to

¹ Note that the label *avertive* is also used in some works to refer to so-called ‘apprehensionals’, ‘timitives’, or ‘aversives’, i.e. structures used to convey that some undesirable event is imminent. While a single form can sometimes have both an apprehensional and an avertive/frustrative meaning, the two semantic categories should not be confused. Cf. e.g. (Vuillemet 2018; Smith-Dennis 2021; AnderBois & Dąbkowski 2021).

articulate thoughts *about* and *in* time, should be seen as more *interactional/interpersonal* than is generally the case in existing works.

The bulk of this study will be dedicated to identifying and discussing semantic and cognitive categories underlying avertives in Australian languages. It is my hope that by elaborating a general, abstract semantic/pragmatic (and ultimately, cognitive) characterization of this category in Australian languages, much will be revealed about the connection between positive events, negative events, and how the mind tackles the flow of events, both individually, and through inter-personal, mixed modalo-aspectuo-temporal representations of time – and not purely aspectuo-temporal / causo-temporal representations of time.

The paper will proceed as follows: I will pave the ground for my investigations in section §2 by briefly presenting existing accounts of avertivity, putting the stress on linguistic diversity along the way, and discussing some important aspectual and modal factors playing a part in our understanding of this category. §3 will be dedicated to an areal typological study of avertives in Australian languages; § 3.1 will present a recurrent cluster of meanings revolving around irrealis inflections in Northern Australian languages whose understanding, I argue, is central to the areal matter at stake, and §3.2 will conduct a detailed survey of avertive structures in a limited, but significant language sample of Australian languages. §4 will identify five major recurrent avertive patterns emerging from the areal survey (§4.1-§4.5), and formulate some a series of key empirical generalizations about the interaction of Australian avertives with modal, aspectual and actional parameters (§4.6) – *modal* subtypes of avertives will be of paramount importance here. §5 will draw extensive theoretical conclusions from this investigation, identifying key development paths and semantic/pragmatic properties structuring avertives in Australia (§5.1), before formulating some important consequences for a general linguistic/cognitive theory of time (§5.2)), and even (§5.3) some speculations relative to socio-cultural parameters possibly inflecting the manner in which we envision *human* time – in essence, how we construe *narratives* and relate human agents to them.

2 Existing accounts and preliminary theoretical elements

2.1 A quick theoretical and typological overview

Although avertive / frustrative particles were identified at least as early as the 1960's^{2,3}, notably in Uto-Aztecan languages, cf. the /ʔas/ particle in Hopi (Voegelin & Voegelin 1969) and the /čim/ in Papago (Tohono O'odham) (Hale 1969), Amazonian frustratives/avertives clearly come to mind first, as it is a very common, and well-identified category in the languages of the Greater Amazonia area, cf. (Aikhenvald 2012: 185), (Campbell 2012: 291). (Overall 2017) offered the first in-depth, areal-typological study of avertivity, but many other Indigenous language phyla/macro-families/families of Central and Northern America also possess grammatical frustratives/avertives: in addition to Uto-Aztecan (cf. also (Chávez 2003; Copley 2005; Copley & Harley 2014; García Salido 2014: 295–296), Yuman–Cochimí (Hardy & Gordon 1980), Salish languages (Bar-el 2005; Davis & Matthewson 2016) and Quechuan languages (Hintz 2011) should be mentioned.⁴

Inflectional and lexico-grammatical avertives were also identified as specific categories in Australian languages as early as the the 1970's, notably in Rembarnga (non-Pama-Nyungan/Maningrida) (McKay 1975) and Iwaidja (non-Pama-Nyungan/Iwaidjan) (Pym & Larrimore 1979). While mentioned in a large number of grammatical descriptions, avertives/frustratives in Australian languages have so far not been studied *per se*.

While avertives/frustratives seem to have been first identified as a distinct grammatical category in Indigenous languages of the Americas and of Australia, they have also been identified in numerous other linguistic areas of the globe⁵. The term *proximative* has thus sometimes been used to refer to what are, in fact, categories in African languages functionally overlapping with avertives (i.e., possessing both proximative and avertive meanings), especially Niger-Congo (esp. Bantu Languages), Nilo-Saharan – cf. e.g. (Heine 1994; Kuteva 1998; Kuteva 2000b; Heine & Kuteva 2002). As was noted in (Alexandrova 2016),

² While (Hale 1969; Voegelin & Voegelin 1969) constitutes the first semantic analysis of the category that I am aware of, relevant datapoints predating these papers can be found in some descriptive grammars. This is for instance the case in (Whiteley 1960: 63).

³ Avertivity is therefore a recently identified category; this fact, combined with its lesser grammatical prominence in well-described Western European languages, probably accounts for its still being markedly understudied.

⁴ And possibly many more – this list is by no means exhaustive; see e.g.:

<https://sails.cld.org/parameters/TAME2-13#5/1.746/289.565>

⁵ (Kuteva 1998; Kuteva 2001: 75–112) offers a first typological overview of avertive grams, but the category is clearly in need of further work in this direction. See also (Alexandrova 2016).

proximatives are an almost universal means of conveying avertive-like meanings, cf. e.g. (8) – these constitute instances of what (Malchukov 2004) calls ‘adversative’ structures.⁶

(8) He was about to leave, but he changed his mind.

Works on Austronesian languages have already discovered a number of avertive grams, see (Kroeger 2017) for a discussion of some existing works, plus e.g. (Foley 1991: 263–264) for a Papuan example, and (Lichtenberk 2008: 170–171) for an Oceanic instance of the category. Turning to Asia, although the category remains relatively poorly studied in Sino-Tibetan languages, they also appear to possess conventionalized avertive structures – cf. e.g (Kuteva 1998:126).

In Indo-European languages, and language families having long been in contact with IE languages, numerous grammatical instances of the category have been identified and studied, see e.g. Slavic and Baltic languages, since at least (Kuteva 1998), cf. (Kuteva 2000a; Plungian 2001; Erelt & Metslang 2009; Alexandrova 2016; Arkadiev 2019) – the label ‘proximative’ is also used in some of these works (Plungian 2005: 135) to refer to functionally overlapping forms⁷. Furthermore, I will claim that (Plungian 2001)’s concept of *antiresultative* refers to a special subset of avertives. The category has been also identified in Uralic (Kuteva 2000a; Kehayov & Siegl 2006: 89; Kozlov 2019), Caucasian (Chumakina 2013), Turkic (Tatevosov 2008; Tatevosov & Ivanov 2009; Korn & Nevskaya 2017), Romance languages (e.g. Galician and Portuguese (Kuteva 2001: 79–80), French (Caudal 2020a), but also Romanian (Coseriu 1976: 104)), Indo-Iranian (Vafaeian 2018)...

From this short typological literature review, it should be clear that avertives are a pervasive type of gram (even though it has so far received limited attention) – so pervasive in fact, that it must be a cognitively salient manner of referring to the flow of events in language, and one we need to consider on top of more mundane ‘actual’ and ‘inactual’ events to better our understanding of human time as evidenced by the semantics/pragmatics of event descriptions across languages.

⁶ The identification of recurrent development paths connecting proximatives to avertives dates back at least to (Kuteva 1998). See also (Kuteva 2001: 75 sq.), (Heine & Kuteva 2002: 94, 132, 206, 214, 215, 309, 310) and (Vafaeian 2018: 17) for more on this, as well as e.g. (Korn & Nevskaya 2017).

⁷ As noted in (Kuteva et al. 2019: 859), Plungian’s (2001) notion of proximatives refers to uncontrollable processes not reaching their terminus – i.e. to non-controlled avertives in my terminology.

2.2 The aspectual dimension of avertives

Let us turn first to the aspectual characteristics of avertives in the existing literature; aspect will be also central to relating avertivity to time, as it plays a crucial part in construing causo-temporally ordered narratives, and generally, in the cognitive conception of events, and therefore, time. Basing their analysis on an undefined typological sample, (Kuteva et al. 2019: 852) argue that avertive grams can generally receive at least a subset of the following aspectual nuances:

- 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.” (Kuteva et al. 2019: 852)

I will here put aside apprehensionals (a) as a distinct category, and will adopt a relatively classic macro-structural event structure theory à la (Smith 1991; Kamp & Reyle 1993), whereby (a) event macro-structure is lexically determined for each verb reading, and (b) can comprise up to three different types of event stages: preparatory stages (found with certain achievement verb readings), inner stages (found for all types of events) and result stages (found with all change-of-state verbs, i.e. telic verbs, semelfactive verbs, so-called degree achievement verbs, and possibly associated with dynamic, subject-controlled activity verbs as well).⁸ Kuteva et al.’s above aspectual typology of avertive will be recast as in 1. – 4. below, using such a macro-structural theory of aspect:

1. Full event structure avertive reading (no stage of the macro-structure is even partially realized – only some kind of expectation or desire holds)

⁸ See (Caudal 2005; Caudal 2011) for a formal implementation of such a theory.

2. Preparatory stage avertive reading (the event is prevented from developing further than its preparatory stage; the attempt made is somehow external to the core meaning of the event predicate conveyed by the verb)
3. Inner stage avertive reading (the event inner stage – typically the process stage of an accomplishment or a bounded degree achievement – stopped developing prior to its completion/terminus)
4. Result stage avertive reading (the event did not achieve the results normally associated with the relevant inner stage (as a change-of-state/process), OR achieved additional, unwelcome results ‘marring’ the expected results, OR the expected results were achieved but turned out to be unstable and did not hold for as long as was desired/expected)

It seems that for a fair number of avertive markers, a restricted number of semantic parameters will determine which of these readings should prevail. These comprise the actional and event structural (Aktionsart) properties of the utterance marked with the avertive gram – e.g., depending on additional contextual factors possibly influencing aspect construal, achievement utterances can give rise to either readings 1 or 2. In effect, readings 1 and 2 can be difficult to distinguish with such utterances; subject control play an important part in this respect. If an attempt at realizing an event is clearly made by some controlling subject (usually an animate entity), then forming a preparatory stage event avertive (reading #2) can be a delicate issue. Thus, (7) can be only be endowed with an avertive reading in a context where it became obvious that the subject was getting ready to leave, i.e. with a preparatory stage avertive interpretation – a pure verbal interaction (i.e. agent said he was going to leave, without actively preparing her/his departure) might not be enough to warrant such an avertive interpretation of this utterance; it takes some active preparation (e.g. a packing event, an outgoing motion).

The Tohono O’odham avertive particle *cem* has been claimed to be able to combine with overt grammatical marking so as to distinguish between aspectual readings #1-#2 (9) vs. #2 (10) vs. #4 (11) (Copley 2007: 27; Copley & Harley 2014: 144). Note that no clear example of avertive reading #3 was found in either (Copley 2007; Copley & Harley 2014) or (Hale 1969).

(9) Huan ’at o cem kukpi’ok g pualt. (Tohono O’odham)
 Juan aux.perf fut frus open det door

unachieved-goal: ‘Juan tried to/was going to open the door.’

(He tripped before he got there / tugged on the door but failed to open it)

(10) Huan 'o cem kukpi'ok g pualt.

Juan aux.impf frus open det door

unachieved-goal: ‘Juan tried to open the door.’

(He pulled but couldn't get it open)

(11) Huan 'at cem ku:pi'o g pualt.

Juan aux.perf frus open det door

‘Juan opened the door in vain.’

non-continuation: Juan got the door open but it didn't stay open

unachieved-goal: The door's being open didn't have the desired effect

So far, several languages have been claimed to offer grams specializing in one of the above readings,⁹ as e.g. the *-axa* frustrative suffix in Ese Eija, which is argued to have such a semantics in (Vuillermet 2012), cf. (12).

(12) [Context: speaker tried to kill a viper by cutting off its head; at first it seemed dead, but then it suddenly came back to life and slithered away]

Majoya eyaa oya ekwe=baa=a sapa-jaja-wexa-jya-'axa-naje.

then 1SG.ERG 3ABS 1SG.GEN=machete=INSTR head-cut-open-DEPR-FRUST-PAS

‘Then I tried to cut its head off with my machete (*lit. I head-cut-off it*).’ (Vuillermet 2012: 491–492)

But this semantic characterization seems a little bit too strong, as the form can also convey full event avertives (reading 1), as in (13)

(13) [Context: dog tried to get the honey, but he is too short]

Ojaya iñawewa wini=jo=pi'ai sowa-'axa-ki-ani.

3ERG dog honey=LOC=ALSO go_up-FRUST-GO_TO_DO-PRS

‘The dog wanted to go up to (reach) the honey.’

Similarly, it is not clear that the so-called ‘inconsequential’ frustrative in Hua (Haiman 1988) (after which (Kuteva et al. 2019: 874 sq.) named avertive reading #4) only conveys result stage avertive readings. It should be noted that the notion of inconsequential readings

⁹ Cf. (Vuillermet 2012: 491): ‘The frustrative morpheme *-axa* specifies that an event is carried out, but the effect/result expected by the person who performs the event is not reached.’

probably dates back to (Plungian 2001)'s concept of *antiresultativity*, which – broadly – corresponds to the notion of avertivity as defined here (especially as a “reversal of expectations”); see also (Malchukov 2004: 194) and (Overall 2017). Plungian observes that antiresultative meanings can follow from unrealized or unstable result states (i.e., some result state was nullified by an external, contextual factor).

The monofunctionality vs. polyfunctionality of avertive structures therefore appears to be a very delicate, and most likely a form-specific issue. As we will see, Australian avertives/frustratives also offer some amount of variation; the interpretation of an avertive form will notably depend on the verb's actional (esp. subject control) and aspectual features, and on broad contextual parameters possibly influencing such features (e.g. whether or not result states hold/are nullified, etc.).

2.3 The modal dimension of avertives

In addition to the above aspectual characterization, (Kuteva 1998; Kuteva 2001; Kuteva et al. 2019) offered a foundational account of avertives in terms of grammaticalization theory and development paths; a more substantial (though far from sufficient) inventory of lexical sources for avertives can be found in (Heine & Kuteva 2002). Both stressed the importance of the modal (or aspect-modal) dimension of avertives, as one of the best studied, and most common, development pathway leading to this category involves volitional lexical elements or grams, and/or proximative¹⁰ lexical elements or grams – cf. (Kuteva 1998; Kuteva 2001)¹¹, who first proposed that volitional grams commonly develop into proximatives, and from there into past counterfactuals, and finally avertives, (14).

(14) Past Volitional > Past Proximative/Future in the past > (Past) counterfactual > Avertive
(Kuteva 2001: 139)

A construction like (7) suggests that shorter, more straightforward lexification paths may exist, (15). As we will see, some Australian languages also provide evidence for another, shorter development path (16) (see also (Kuteva 1998: 145)).

(15) Past volition > Past Avertive

¹⁰ Proximatives, which convey ‘imminent future’ meanings, largely overlap with progressives, and like them, can be regarded as equally modal and aspectual (i.e., they convey so-called ‘prospective aspect’, cf. e.g. (Sansò 2020)).

¹¹ See (Arkadiev 2020) for specific hypotheses concerning the development path of the Lithuanian avertive.

- (16) Past volition > Past Avertive
 > Future in the Past / Past Proximative > Past Counterfactual

In addition to the above grammaticalization or lexification-based analyses, specific avertive grams or lexico-functional items have been the object of synchronic, partially formal *modal* analyses. (Copley 2005; Copley & Harley 2014) are probably the most extended work of that type. They share with (Carol & Salanova 2017) an account inspired from (Dowty 1979)'s notion of inertia,¹² but these two (partial) implementation diverge w.r.t. the underlying concepts and machinery: Copley & Harley resort to their force-dynamics approach, which eschews possible worlds (and even explicitly claim they should not be involved in the analysis of the Papago particle /čim/), while Carol & Salanova opt for a more mundane 'event inertia' semantics approach to avertives in Chorote and Mëbêngôkre, borrowing (Landman 1992)'s formal rendering of Dowty's notion of inertia as stages, *via* (Arregui, Rivero & Salanova 2014). In contrast to the two inertia-inspired accounts I have just mentioned, (Kuteva et al. 2019) and (O'Hagan 2018) opt for a non-formal, purely aspectual account. (O'Hagan 2018) observes that telic and atelic verbs do not pattern similarly with the Caquinte frustrative constructions involving a verbal suffix (-be) and/or a clitic (=me); its account is otherwise essentially identical to (Kuteva et al. 2019).

In this paper, I will advocate for a more complex, and hybrid TA/M account of Australian avertives (i.e. possessing both an aspectuo-temporal and a modal dimension), essentially proposing that semanticized avertive structures (not utterances based on simple proximatives) in these languages (i) have a clear negative event meaning and are sensitive to Aktionsart parameters (ii) involve an underlying modal component of meaning – either capacity or volition-related – and (iv) are semantically complex expressions, comprising a complex event description. This is obviously at odds with (Copley & Harley 2014: 140)'s view that one should not introduce a plan modal in the denotation of Papago/Tohono O'odham avertive *cem*. Their key argument is that *cem* also possesses so-called 'decessive', 'non-continuation' past readings (cf. Eng. *used to*); see (Hale 1969: 211) and (17) – such a reading is quite

¹² Dowty defines inertia world as 'are to be thought of as worlds which are exactly like the given world up to the time in question and in which the future course of events after this time develops in ways most compatible with the past course of events'. It captures the intuition that a proposition denoted by an utterance in the progressive could be true at a world *w* and interval *I* even if the corresponding event did not culminate at *w* but culminated at every inertia world given by *I*, *w*.

common for Uto-Aztecan and Amazonian avertives alike, but does not seem to arise (or is not salient at all) with Australian languages.

(17) 'O'ohona 'o cem suam (Tohono O'odham)

Sign aux-impf frus yellow.

'The sign was yellow/used to be yellow'. (Copley 2007)

Such an objection cannot hold for Australian avertives though as we will see, as they are deprived of similar readings with statives, and can exhibit strong volitional or capacity readings.¹³

Maybe somewhat unsurprisingly, many empirical generalizations and theoretical conclusions put forth here will converge most with those of (Overall 2017) (with *frustrative* in his terminology being a somewhat narrower term than my understanding of *avertives*); I will come back to this in the final section of this paper.

Last but not least, before turning to the areal typological study of my investigation, I should mention two additional hypotheses I will be making below:

- (i) Following (Clendon 2014), I will consider avertivity to subsume frustrativity, in the sense that I regard avertives to fall into two wide subclasses w.r.t. actionality and argument structure, namely *non-controlled avertives* (or NC-avertives) vs. *controlled @avertives* (or C-avertives) – the latter corresponding to frustratives. In other words, only C-avertives can give rise to paraphrases or translations using 'try' verbs – in contrast, proximative adverbials ('nearly, almost') as well as lexico-grammatical / grammatical proximative markers ('be-PST going to', 'be-PST on the verge of', etc.) can be used to paraphrase, or translate, both SC and NSC avertives, depending on

¹³ I would also like to point out that Copley & Harvey's argument tacitly rests upon the assumption that a monosemous account for *cem* is desirable. However, such an assumption is seldom warranted for TAM categories, as soon as we have access to diachronic data – diachrony generally forces us to abandon monosemous approaches to the vast majority of TAM categories, whether inflectional or not, when their meanings appear to substantially vary with time, and when they become polyfunctional; see (Caudal 2018a) for an extended discussion. It could well be, in fact, that *cem* triggers two different conventionalized readings with different aspectual types, i.e. that its 'decessive' and 'avertive' readings are separate conventionalized readings. For an instance of such an analysis, see (Caudal 2020b)'s treatment of inchoative readings of the stative verbs in the *passé simple* or *passé composé* resorting to (Asher 2011)'s notion of *dependent type coercion* (where so-called 'bridging functions' can be treated as conventionalized, extended meanings – it could even be that the avertive readings of *cem* are, in fact, the innovative, layered meanings (Hopper 1991)). Non-monosemous analyses are, generally speaking, better suited to the intricacies of language change, and probably more realistic from that point of view than monosemous analyses. Finally, the development of aspectual-type triggered conventionalized meanings, seem to be common in the evolution of TAM categories.

contextual factors. In the remainder of this paper, I will therefore only refer to the relevant markers as (C- or NC-) avertives.

- (ii) So-called non-culminating accomplishments’ were first identified for Salish languages in (Bar-El 2005, Bar-El et al. 2006), cf. (1). Similar data points were then identified and studied across many languages e.g. Turkic, Caucasian, Finno-Ugric (Tatevosov 2008; Tatevosov 2020), Indo-Iranian (Arunachalam & Kothari 2010; Arunachalam & Kothari 2011) Slavic (Altshuler 2014; Filip 2017), Papuan (Kroeger 2017), Germanic/Romance (Martin & Schäfer 2012; Martin & Schäfer 2017), Sino-Tibetan (Koenig & Chief 2008), Kra-Drai (Koenig & Muansuwan 2000), Uto-Aztecan (Copley & Harley 2014), Austronesian (Paul, Ralalaoherivony & Swart 2020) ...– cf. e.g. (Martin & Demirdache 2020) for a review of the existing literature. They constitute instances of what I will call ‘partitive culminations’ (PCs).

- (18) chen ilhen kwi skawts welh haw
 ls.SG eat DET potato CONJ NEG
 k-an i huy-nexw (Skwxwú7mesh)
 IRR-ICNJ PART finish-TR(LC)
 ‘I ate a potato but never finished it.’ (Bar-el 2005: 82)

PCs will be regarded as a type of avertive strategy in this survey – in line with e.g. Salish (Davis & Matthewson 2016). But following (Kroeger 2017), I will nevertheless argue against the possibility of providing a substantially unified analysis of avertives and PCs, à la (Copley & Harley 2014). I will provide evidence further in the paper that only a limited functional convergence can hold between these two types of phenomena.

3 Avertivity in Australian languages: an areal typological pilot study

Let us now move to the central object of the present study, namely avertivity in Australian languages. I will here offer a tentative overview of their avertive systems, based on a small sample of languages, especially non-Pama-Nyungan languages – primarily because these languages exhibit a striking homogeneity w.r.t. their grammaticalized avertive markers. Non-Pama-Nyungan are frequently endowed with what I will refer to as *irrealis-avertive inflections*. These typologically unique inflections are especially worthy of consideration due to their striking polyfunctionality (first identified for Murrinh-Patha in (Nordlinger & Caudal

- (22) marda the-na-mut-tha palngun. (Murrinh-Patha)
 neg 2sgS.poke(19).PstIrr-3s.m.ben-give-PImp female
 a. ‘You didn’t give him that girl.’
 b. ‘You shouldn’t have given him that girl.’ (Nordlinger & Caudal 2012: 106)

Through collaborative work and field work¹⁵ on the modal systems of other non-Pama-Nyungan, I later discovered that Iwaidjan (Iwaidja (23)-(25)), Gunwinyguan (Anindilyakwa (26)-(27)) and Mirndi languages (Jaminjung, (28)-(29)) also exhibit similar patterns:

- (23) ayana-wu-ni ba karlu (Iwaidja)
 1sg>3pl.PCF-hit-PCF but NEG
 ‘I was going to hit them/I nearly hit them, but I didn’t. (Author’s fieldwork)
- (24) yuwa-ran mungu. Angana-mi-na ngartung, (Iwaidja)
 2sg.ANT.PROX-come-ANT not.know 2sg.PCF-say-PCF OBL.1sg
 ngana-lakbi-na yuw-ara. Ba karlu ngana-mi-na nuwung.
 1sg.PCF-know-PCF 2sg.PR-go-PR CONJ NEG 1sg.PCF-say-PCF OBL.2sg
 ‘You just came without letting me know. You should have let me know, because if I had known you were coming, I would have said ‘no’ to you.’ (Dictionary)
- (25) karlu ayana-wu-ni (Iwaidja)
 NEG 1sg>3pl.PCF-hit-PCF
 1. ‘I didn’t hit them.’
 2. ‘I should not have hit them’. (Author’s fieldwork)
- (26) n-akəna kə-rrak-aje=yedha chair=manja ekena (Anindilyakwa)
 3M-that IRR.3M-forehead-stand.PST=PURP NEUT.chair=LOC then
 dh-akəna dhədharrəngka yingməŋ-angma-Ø=dhə akən
 3F-that 3F.woman REAL.3F>VEG(?)-steal-USP=TRM NEUT.that
 chair=a
 NEUT.chair=PF
 ‘He was going to sit on the chair, but the woman took it away’ (Bednall 2019: 371)
- (27) nara n-akəna kenu-kwa-Ø a-rmdak-akəna angwarnda (Anindilyakwa)
 neg 3m-that PCF.3m/2-give-PCF neut-many-that neut.money
 1. He didn’t give you all that money

¹⁵ I am indebted to joint work conducted with Rob Mailhammer on Iwaidja and with James Bednall on Anindilyakwa (including field work) (cf. e.g. (Caudal, Mailhammer & Bednall 2019), and with Eva Schultze-Berndt on Jaminjung (see in particular (Caudal & Schultze-Berndt 2016)).

2. He shouldn't have given you all that money. (Bednall 2019: 345)

(28) yatha nga-b-irriga-na mangarra dempa damarlung
 alright 1sg:3sg- POT:COOK-IMPF plant.food damper nothing
 'I was going to/wanted to bake bread all right, damper, (but) nothing (i.e. I didn't)'
 (Schultze-Berndt 2000: 93)

(29) yagbali birdij gana-w-arra-nyi, (Jaminjung)
 place find 3sg:3sg-FUT-PUT-IMPF
 Buru ga-jga-ny Gurlugurlu waga ga-rdba-ny
 return 3sg-GO.PST <place.name> sit 3sg-FALL-PST
 'he wanted to find a camp, he went back to Gurlugurlu and sat down (i.e. stayed there)' (ibid.)

3.2 Language sample, method and overview of avertive structures

For want of space to address the huge diversity of forms existing across Australian languages,¹⁶ the survey offered here will be limited to a relatively small sample of 17 languages, taken from 7 non-Pama-Nyungan language families, and 6 Pama-Nyungan language families, cf. Table 1.

	Language family	Language
Non-Pama-Nyungan	Iwaidjan	Iwaidja
		Mawng
	Gunwinyguan	Anindilyakwa
		Kunbarlang
		Bininj Gun-Wok
	Daly River	Murrinh-Patha
	Mirndi	Jaminjung
		Wambaya
Maningrida	Gurr-goni	
Nyulnyulan	Nyikina	
Bunuban	Gooniyandi	
Pama-Nyungan	Tangkic	Kayardild
	Ngumpin-Yapa	Warlpiri
	Ngarla	Pilbara
	Western Desert	Yankunytjatjara
	Arandic	Arrente
	Karnic	Arapana

Table 1: the language sample studied

¹⁶ While a larger areal typological study has been conducted on a larger sample of 67 languages, its results are far too complex to discuss in such limited space.

Table 2 summarizes the results of the grammar mining study conducted on the sample, combined with field work results on two languages.

1	2	3	4	5	6	7	8	9	10	11	12	13	14
Language family	Language	MOD.PST averitive inflection	MOD averitive + NEG construction	IRR.PST vs. IRR.PR	Negative past events = NEG + IRR.PST	Past proximalive / volitional	Avertive PART/Clitic=/ Prefix+ V-IRR	Avertive PART/Clitic=/ Prefix+ V-PST	V-IRR- Suffix/=clitic/ +PART averitive	V-PST-averitive Suffix/=clitic/+ PART	Almost/nearly/ about to + V-PST/IRR and other proximalives	PCs with V-PST + NEG	Pragmatic PC V-PST
Iwaidjan	Iwaidja	V-IRR.PST FRUST V-PST/FUT/IRR VOL V-PST/IRR ¹⁷	karlu/arlarrar ¹⁸	✓ × ✓	karlu — —	✓ ✓ ✓	(wurrkany, maju) — —	— (wurrkany, maju)	—	—	wanji 'almost, nearly', RED-PST	karlu; arlarrar	V-ANT
	Mawng	NFUT-V-IRR2	—	✓ ¹⁹	marrik	✓	—	—	—	—	wurkaj 'nearly, about to'	arlarrar	V-PP
Gunwinyguan	Anindilyakwa	IRR-V-PST/∅	nara/yanda	✓	nara	✓	—	—	=yedha	—	—	nara	REAL-V-∅
	Kunbarlang	(V-IRR.PST) CTFCT V-IRR.PST	karlu karlu	✓ ²⁰ ×	ngunda (*) —	× ✓	(yimarne(k)) —	—	—	—	—	—	—
	Bininj Gun-Wok	V-IRR ²¹ CTFCT V-PST/IRR	burrkyak/larrh/ga yakki/kurru ²²	×	djama; minj; marrek —	✓	kuyin-V; ba(r)lanh-V ²³ ; yimarnek 'like'; djanggogo 'for nothing'; djaying 'mistakenly' —	djaying, (yimarnek)	djaying —	—	kuyin-/ba(r)lanh-V- PFV/IPFV/IRR V-RED-IRR/PST ²⁴	gayakki ²⁵	—
Daly River	Murrinh-Patha	IRR.PST-V-IRR.IPFV	ma wurda ²⁶	✓	mere; manangka	✓	—	ngurdammay 'try' classifier ²⁷	—	—	—	ma wurda	—
Mirndi	Jaminjung	IRR:V-IPFV	damarlung	✓	gurrany	✓	—	birri/ngarla 'try'	—	—	klosap 'almost'	damarlung ²⁸	—

¹⁷ *FRUST* and *VOL* labels respectively stand for two Iwaidja particles: *wurrkany* (negative evidential-avertive) and *maju* (volitional-avertive). Alternatively, they could appear in column #8/#9.

¹⁸ *Karlu* in Iwaidja can be both sentential negation, and a negative interjection ('no'). Cpr. BNG *djama* (sentential negation) vs. *burrkyak* ('no, nothing'), (Evans 2003: 603–604)

¹⁹ The Mawg irrealis 2 (I2) inflection can have both present and past priority modal (Portner 2018) readings; it is otherwise a past irrealis.

²⁰ Note that some younger speakers seem to accept forms combining IRR.PST prefixes with IRR.PR suffixes, cf. (Kapitonov 2019: 178).

²¹ The Bininj Gun-Wok irrealis morphology is temporally ambiguous.

²² One should also mention the so-called 'INCEptive' reduplication, which further stresses the duration of the (failed) attempt (Evans 2003: 374).

²³ Cf. (Evans 2003: 525, 611)

²⁴ The so-called 'inceptive' reduplication can have avertive readings ('tried but failed') with irrealis or past tense-marked verbs in BNG, cf. (Evans 2003: 374, 381).

²⁵ Cf. (Evans 2003: 306)

²⁶ Cf. (Ford & McCormack 2007: 17; Nordlinger & Caudal 2012: 106).

²⁷ Cf. (Ford & McCormack 2007: 7).

²⁸ Cf. (Schultze-Berndt 2000: 93).

	Billinara	V-IMP ⁴⁷ V-IRR.PST	najing ⁴⁸ najing ^{49,50}	✓ ×	×	✓ ?	nganda= (?)	—	—	(= <i>nga</i>) (‘dubitative’)	RED- ⁵¹	—	—
Pilbara	Ngarla	V-IRR.PST	—	✓	mirta/ngurra (pirli)	—	—	purtukarri ⁵²	—	—	RED- walyi / pilyparr	—	—
Western Desert	Yankunytjatjara	(V-INTENT _N) ⁵³	—	×	×	✓	putu V-INTENT-INCH-PST.IMPF	putu V-INTENT-INCH-PST.IMPF	najing	—	—	—	—
Arandic	Arrente	Aux-PURP V.PST	—	✓	tyekenhe ⁵⁴	✓	—	uyarne V-PST	—	V-RED- <i>elpe</i> ‘about to’ ⁵⁵	ingkwe	—	—
Karnic	Arapana	—	—	×	×	×	—	<i>panta</i> V-PST ‘unsuccessfully’	×	- <i>alpa</i> ‘not quite, nearly’	walyili-walyili ‘nearly’ ⁵⁶	panta-li NEG.adv	—

Table 2: Avertive patterns in our language sample

⁴⁷ Although (Meakins & Nordlinger 2014)’s label for this inflection is *IMPerative*, its semantics is clearly broader than that of a ‘priority’ modal (Portner 2018).

⁴⁸ Sentential negation does not seem to appear in the pattern; instead, we find *najing* (‘nothing’), a loanword from English (via Gurinji (Kriol), possibly).

⁴⁹ The present irrealis in Bilinarra combines the IMP (i.e. IRR) suffix with HORTative *-rla*. The past irrealis-avertive is realized by adding the DUBitative clitic =*nga* to the irrealis.

⁵⁰ Interestingly, the Bilinarra negator *lawara* ‘nothing’, cognate with Warlpiri *lawa* ‘no’, is not found in the avertive examples of that type found in (Meakins & Nordlinger 2014).

⁵¹ Cf. (Meakins & Nordlinger 2014: 162), ex. 417.

⁵² *Purtukarri* is obviously cognate with the Western Desert avertive capacitative (‘couldn’t’) particle *putu*, and *walyi* with the Karnic proximative (‘nearly’) *walyi*.

⁵³ Yankunytjatjara *-kitja* INTENT is a nominalizing derivational volitional suffix, with avertive implicatures; it has no fixed temporal content. Pintupi-Luritja has a similar form (Goddard 1985: 163). It also appears in the semanticized avertive construction *putu* (‘in vain’) *V-kitja-INCH-PST.IMPF*, followed by a verbalizing suffix (INCH) – the latter construction is therefore verbal.

⁵⁴ The Arrente verb negator *tyekenhe* is obviously cognate with the PURP (*-tyeke*) inflection, so it could actually be a negative modal (irrealis) form too.

⁵⁵ The meaning of that special reduplicated verb pattern seems to be proximative (Wilkins 1989: 261–262), but can have strong (and possibly mildly conventionalized) avertive implicatures.

⁵⁶ Derived from *walya* ‘soon, directly’, (Hercus 1994: 216); negative adverbial *panta-li* is similarly derived from *panta* ‘not, in vain’.

Columns #3 to #7 serve to identify forms conforming to the irrealis-avertive cluster, i.e. forms exhibiting (at least part of) the polyfunctionality identified in §3.1 : column #3 lists the forms combining an averative meaning (in fact averative implicatures) with at least two other modal meanings; column #4 indicate with what negation (if any) irrealis-avertive forms can combine to form semanticized averative constructions; column #5 specifies whether the language has morphologized the distinction between irrealis present vs. past; column #6 indicates whether irrealis-avertive forms have present vs. counterparts; column #7 indicates whether or not they have volitional/proximate meanings.

Last but not least, it should be said that I left out from this study lexical averatives (‘fail’) such as (30); these are frequent (e.g. Mawng has several specialized lexical averatives),⁵⁷ and as such also reflect on a cognitively pervasive category; but for want of space (and ease of exposition), I will be focusing on at least partly grammaticalized devices in this paper.

(30)	ŋai	caŋkaaŋi	ŋuŋca-na	ŋuji-na	(Kalkatungu)
	I	here	fail-PST	fall-PST	
	‘I nearly fell’ (or ‘I escaped from falling’)				(Blake 1979a: 61)

4 Discussion and empirical generalizations

Let us now discuss the facts summarized in Table 2, and offer some tentative empirical generalizations concerning the form and meaning of averative structures in Australian languages. Several recurrent morpho-syntactic types of (lexico-)grammatical patterns were found in the sample, and are of particular relevance to the present study:

1. Modal inflections (especially irrealis/potential/future, but also narrower modal inflections, such as ‘PURPositive’ (in Arrernte) or ‘INTENTive’ (in Yankunytjatjara) endowed with more or less clear averative implicatures (some border on the conventional, already) – see columns #1 to #7; these can generally combine with negative markers (column #4) to form what I will claim to be conventionalized, reduced biclausal averative constructions, or other conventional averative structures with dedicated averative markers (as pre- or postverbal particles, clitics, affixes/infixes, or a

⁵⁷ In some Australian languages though, lexical/constructional are not known to exist, or at least were not elicited in past field work studies, cf. e.g. Wubuy (Heath 1984: 345).

combination of several such elements) (columns #8 to #11). These patterns are typically found in non-Pama-Nyungan languages in our sample, but also in neighboring Pama-Nyungan language families (Tangkic and Ngumpin-Yapa).

2. Irrealis/modal markers combined with special avertive markers (again as pre- or postverbal particles, clitics, affixes/infixes, or a combination of several such elements) with negation or dedicated particles. These are found across both non-Pama-Nyungan and Pama-Nyungan languages.
3. Patterns involving indicative past verbs with imperfective/proximative markers, i.e. past imperfective or REDuplication patterns, with or without additional markers
4. Non-modal, past perfective inflections combined with combined with special avertive markers of various types. These are predominant in Western Desert, Arandic and Karnic languages. They possibly constitute cases of periphrastic avertive morphology as well, though it is difficult to say on such a limited empirical basis.
5. ‘Partitive culminations’ (a term I’m coining after (Martin & Demirdache 2020)’s *partitive accomplishments*) utterances, i.e. telic indicative utterances marked with a ‘weak’ perfective tense, without clear culmination or stable results (i.e. non-culminating accomplishments (see columns #12 to #14) – ‘X V-ed but did not finish V-ing/failed to V’.

I will successively discuss below each of these avertive patterns (§4.1 - §4.5), after briefly addressing the issue of avertive aspectual and actional subtypes in the sample (§4.6).

4.1 Avertive pattern #1: inflectional past modal irrealis and the (typically non-Pama-Nyungan) irrealis-avertive cluster

Avertive patterns involving a past modal inflection are vastly predominant in the sample, with 16 languages out of 17 offering at least one such pattern (column #1 in Table 2). The present study also confirmed that the type of polyfunctionality identified in §3.1 is found in all non-Pama-Nyungan language families of our sample, with some limited variation: Bininj Gun-Wok and Mawng stand out w.r.t. the temporal anchoring of the irrealis; it is completely neutralized in Bininj Gun-Wok system (the irrealis inflection can have both present and past anchoring) and partially neutralized in Mawng (the IRR2 inflection can have present

anchoring under its priority⁵⁸/deontic readings). Examples of the irrealis-avertive cluster in Iwaidjan, Gunwinyguan (cf. Kunbarlang (31)-(33) and Bininj-Gunwok (34)-(39))⁵⁹, Bunuban (Gooniyandi (41)-(44)), Maningrida languages (Gurr-goni (45)-(49)) and Nyulnyulan languages (Nyikina (50)-(53)) are given below:⁶⁰

- (31) na-buk yimarnek ki-buddu-karlkangkki la (Kunbarlang)
 i-person CTFCT 3sg.neg-3pl.obj-stalk.irr.pst conj
 kadda-rnay la kadda-bum.
 3pl.nf-see.pst conj 3pl.nf-hit.pst
 ‘He was going to sneak up on them, but they saw him and beat him.’ (Kapitonov 2019: 291)
- (32) ngunda ngay-buddu-wuni. (Kunbarlang)
 not 1sg.irr.pst-3pl.obj-give.irr.pst
 ‘I didn’t give it to them.’ (Kapitonov 2019: 8)
- (33) nguddu-yung mandjang ki-nguddu-bu. (Kunbarlang)
 2pl.irr.np-lie.irr.np perhaps 3sg.irr.np-2pl.obj-hit.irr.np
 ‘If you sleep [in the house] you might get hurt.’ (ibid., p. 188)
- (34) yi-man.ga-yi. (Bininj Gun-Wok)
 2-fall-IRR
 ‘You nearly fell.’ (BNG) (Evans 2003: 373)
- (35) yimarnek kam-ra-yinj la Ngarridj bi-rrahme-ng. (Bininj Gun-Wok)
 CTRFAC 3hitherp-go-IRR CONJ [subsection] 3/3hP-block-PP
 ‘She was going to come but the Ngarridj wouldn’t let her’ (Evans 2003:611)
- (36) a-rrowkme-ninj / a-bu-yi. (Bininj Gun-Wok)
 1/3-shoot-IRR 1/3-hit-IRR
 ‘I nearly shot it/nearly hit it.’ (ibid.)
- (37) yimarnek nga-rrulubu-yi, la Ø-bid-deyhmeng, minj Ø-dowkme-ninj. (BNG)

⁵⁸ In the sense of (Portner 2018). Imperatives are semantically performative priority modals, whereas deontic are only contextually, indirectly performative modals. Many so-called ‘imperatives’ in descriptions of Australian languages rather seem to be deontic modals – or even semantically broader modals, with deontic uses, and contextually performative deontic (imperative/hortative-like) uses. In our sample, see e.g. the so-called ‘imperative’ in Bilinarra (Meakins & Nordlinger 2014), which I here claim to be an irrealis/modal inflection.

⁵⁹ I must thank Murray Garde for pointing out to me that the kind of ambiguity exhibited by (22) also existed in the Bininj Gun-Wok modal system.

⁶⁰ I will not attempt to provide a more thorough inventory of non-Pama-Nyungan language families exhibiting the same polyfunctionality for irrealis-avertive inflections, but similar observations can also be made about several others.

- CTRFAC 1/3-shoot-IRR but 3-hand-clickpp not 3P-go.off-IRR
 ‘I tried to shoot but the trigger just clicked without it (the gun) discharging.’ (ibid.)
- (38) larrk, marrek Mardayin birri-bimbuyi, ya na-djamun (Bininj Gun-Wok)
 Nothing NEG [ceremony] 3aP-paint-IRR yeah MA-sacred
 ‘No, they didn't paint Mardayin ceremony designs, they are sacred.’ (ibid., p. 282)
- (39) bi-ma-yi Na-burlanj gun-mak. (Bininj Gun-Wok)
 3/3hP-marry-IRR MA-[skin] IV-good
 ‘She should have married straight, to a Naburlanj man.’ (ibid., p. 375)
- (40) wambawoo gilangginaddirni (Gooniyandi)
 nearly it:might:have:knocked:me
 ‘(the car) nearly knocked me.’ (McGregor 1990: 533)
- (41) bariyoondirni marlami bithami (Gooniyandi)
 he:might:have:climbed not he:got:stiff
 ‘He tried to climb up, but couldn't. He was too stiff.’ (ibid.)
- (42) yaanya thangarndi jaggilimirni nyinlimi (Gooniyandi)
 other word I:might:have:said I:forgot:it
 ‘I was going to tell another story, but I forget it.’ (ibid., p.534)
- (43) manyi yan.ginngindi wardgilarninganggi marlami (Gooniyandi)
 food you:asked:me I:might:have:brought:it:for:you not
 ‘You asked me for bread. I should have brought you some [but I didn't]’. (ibid. p. 535)
- (44) wardngirni milaalarni (Gooniyandi)
 I:might:have:gone I:might:have:seen:him
 ‘(Had you told me) I would have gone and seen him.’ (ibid., p.534)
- (45) mundjarra ngu-rra-dji+rni wurru warrpura (Gurr-goni)
 AVERT 1MinA.3MinO-shoot-Irrl but underarm.sweat
 gu-numi-rri ngapala.
 3MinA.31VO-smell-Pre IMin+Dat
 ‘I tried to/was going to shoot it, but it smelt my sweat (and ran off).’ (Green 1995: 314)
- (46) weleng galu awurr-beki-ya+rni. njiwurr-ni-∅ njiwurr-rruwjdjiyi-ni.
 then NEG 3AugS-arrive,come out-Irrl IAUGS-sit-Pre IAUGS-cry-Pre
 ‘Then they didn't come. We sat (and) cried.’ (Gurr-goni) (ibid., p. 341)
- (47) wurru at-gardi nji-na-ga-tji-rni ngapala. (Gurr-goni)

- but 3I-flesh 2MinA.3MinO-twds-take-Irr 1 IMin+Dat
 ‘But you might have brought some meat for me.’ (Green 1995: 196)
- (48) gi-yini-gi+rni ngu-bogi-ya+rni Nangak, worro. (Gurr-goni)
 [3IVS-do thus-Irr1] 1MinS-go-Irr1 place.name what.a.pity
 ‘I was going to go to Nangak today, what a pity.’ (ibid.)
- (49) maka dji-na-djeka-nga+rni, nguwurr-bogi-ya+rni. (Gurr-goni)
 FaMo 3IIS-twds-go back-Irr1 1+2AugS-go-Irr1
 ‘Your grandma could have come back, (so) we could all have gone.’ (= if your grandma had
 come back, we would all have gone) (ibid., p. 195)
- (50) ŋ ɲa-la-MA-na-dyi⁶¹ miliya maɭu ɲa-la-MA-na (Nyikina)
 lsg-IRR-go-past-EXP now NEG lsg-IRR-go-past
 ‘I was going to go this morning but I didn't go’ (Stokes 1982: 281)
- (51) miliyarri dumarra ɲa- l(a)-ANDI-na (Nyikina)
 almost take off lsg-IRR-pick up-past
 ‘I nearly took off’. (ibid., p. 281)
- (52) malu ɲa-l(a)-ANDI-ny-dyina ginya-yi (Nyikina)
 NEG lsg-IRR-pick.up-past₂-3sgDatPro dem-DatPro dem-DAT
 ‘I didn't get (it) for that one!’ (ibid., p. 69)
- (53) ya-la-(rr)-DI-na-da mabu (Nyikina)
 Insg-IRR-(nmin)-sit-past-HABIT good
 ‘we should have been good (but we weren't)’ (ibid., p. 281)

The cluster also seems to permeate part of the Pama-Nyungan zone, especially Ngumin-Yapa, Tangkic and (to a lesser extent) Pilbara languages, as their IRR.PST forms exhibit most traits of the non-Pama-Nyungan irrealis-avertive cluster (columns #2 to #7) – but it does not seem to extend to Arandic, Western Desert and Karnic languages (these lack either negative past events encoded by NEG+PST.IRR, and/or a volitional/proximative PST.IRR). Kayardild (Tangkic) offers one of the most (if not the most) complex irrealis-avertive system in the sample, with no fewer than four distinct inflectional forms (synthetic or periphrastic) having avertive meanings.

⁶¹ (Stokes 1982: 14) notes *ɲ* what he describes as a ‘nasal dorsal’, but it’s unclear whether it what kind of velar nasal it is exactly – possibly just /ŋ/.

The first averting inflection is the dedicated periphrastic averting *V-nangarr(a)* ‘almost V-’,⁶² is compatible with both agentive and non-agentive verbs; it selects the modal ABLative case, (54)-(55). It stands out in the sample as being the only dedicated averting inflection with a synthetic morphology (as opposed to numerous instances of periphrastic inflections with a dedicated, semantic averting content; see below).

(54) bulkurdudu ngijin-jina baa-nangarra kurthurr-ina (Kayardild)
 crocodileNOM 1sgPOSS-MABL bite-AVERT shin-MABL
 ‘crocodile almost bit me on the leg.’ (Evans 1995: 261)

(55) [Of a man crushed by a falling tree:]
 niya budii-nangarr, [warirra-ntha barji-n-marri-nja (Kayardild)
 3sgNOM run-AVERT nothing-COBL fall-N-PRIV-COBL
 niwan-jinaa-nth]
 COBL3sg-MABL-COBL (ibid.)
 ‘He just about got away, then nothing would have happened, it wouldn’t have fallen on him.’

The more polyfunctional counterfactual particle *nginja*,⁶³ combines with the indicative ‘non-future’ (here, contextually past) tense (V-ACT) to form an irrealis-averting cluster with a range of meanings similar to those found with e.g. the Iwaidja past irrealis-averting, namely (negative) past/present deontic (‘X shouldn’t have V-ed/shouldn’t V’), cf. (57)-(58). A *nginja* + *V-POT* ‘X will V for nothing’ meaning also seems to be attested (Evans 1995: 383).

(56) barruntha-y duruma-th, nginja ngumu-wa-th, nginja (Kayardild)
 yesterday-LOC lie-ACT CTFCT2 black-INCH-ACT CTFCT2
 kamburi-ja muma-th, ja-warri
 speak-ACT thunder-ACT rain-PRIV
 ‘(The weather) lied yesterday. In vain the sky blackened, in vain the thunder spoke, there’s no rain.’ (Evans 1995: 382)

(57) nginja diya-ja mala-y (Kayardild)
 CTFCT2 eat-ACT beer-MLOC
 ‘(You schoolkids) shouldn’t have drunk that beer.’ (Evans 1995: 383)

(58) nginja rikarrkati-n-da kularrin-d (Kayardild)
 CTFCT2 cry-N-NOM brother-NOM

⁶² Glossed as ‘ALMOST’ in Evans (1985, 1995).

⁶³ Glossed as ‘FRUSTrative’ in Evans (1985, 1995).

‘Your brother shouldn't be crying.’

(ibid.)

On top of *nginja* (+ *V-ACT*), Kayardild also possesses a counterfactual particle *maraca*. It combines with a POT-marked verb, and forms a broad irrealis-avertive cluster, with readings ‘should_{deontic} have, could have (but didn't), would have, was going to, meant/wanted to (but didn't)’, as well as evidential meanings⁶⁴ cf. (59)-(62). It can also combine with the NFUT (*ACT*) inflection, and then has ‘pretend’ (obviously related to evidential ‘not what it seems’ avertive meanings – see below) (Evans 1995: 378). Its original meaning is similitive (‘like’).

(59) *maraka* *yuuma-thu barruntha-y* (Kayardild)
CTFCT1 drown-POT yesterday-MLOC
‘He could have drowned yesterday (but didn't).’ (Evans 1995: 379)

(60) *kilda maraka diya-nangku mala-wu* (BNG)
2pl.all CTFCT1 drink-NEG.FUT beer-MPROP
‘(You schoolkids) shouldn't have drunk that beer.’ (Evans 1995: 383)

(61) *yakuri-wu maraka kurdala-thu, maraka maku-nku*⁶⁵ (Kayardild)
Fish-MPROP CTFCT1 spear-POT CTFCT1 use.bark.torch-NEG.POT
kurdala-thu yakuri-wu.
spear-POT fish-MPROP
‘he had meant to spear fish, to spear fish using a bark torch’ (Evans 1995: 722)

(62) *maraka birdiru-thu!* (Kayardild)
CTFCT1 miss-POT
‘(They said) I was going to miss, but I didn't!’ (Evans 1995: 654)

It must be stressed that Table 2 comprises several periphrastic irrealis-avertive inflections based on modal particles combined with certain tenses, in addition to the the two Kayardild periphrastic irrealis-avertives discussed above. See e.g. the Iwaidja *maju+V-PST* and *wurrkany + V-PST/FUT* irrealis-avertives,⁶⁶ cf. (63)-(66), and the Kunbarlang *yimarnek + V-*

⁶⁴ (62) seems to be a (rare in the sample) instance of hearsay evidential avertive – ‘they said that P, but it turned out that non-P’.

⁶⁵ Because of this NEG.POT form; I suspect the rendering of this example should rather be: ‘he had meant to spear fish, to spear fish without using a bark torch’ – indeed the agent got lost in the fog as a result of not seeing anything.

⁶⁶ *Maju* is derived from root *maju* ‘want’, so it is clear volitional modal, while *wurrkany* suspiciously like an intransitive 3p. past verbal form (*w-urrka-ny*); it could possibly be related to the *-burrkan-* (tr.) ‘dream’ root), which would be in line with its negative evidential, hence avertive meanings.

IRR.PST irrealis-avertive (clearly related to the BNG *yimarnerk* + *V-IRR* irrealis avertive), cf. (31) and (Kapitonov & Gentens 2018).

- (63) *maju birdirlkbu-ny. Nganduka a-bi-ny? (Iwaidja)*
 VOL 3sg.ANT-struggle.fre-ANT INT 3sg.ANT-do-ANT ?
 ‘He tried to struggle free but in vain.’ (lit. ‘but for what?’) (Iwaidja Dictionary)
- (64) *wurrkany yanara karlu artirra-n. (Iwaidja)*
 FRUST 3sg.DIST.FUT-go-FUTNEG 3sg.ANT-come.back.ANT
 ‘He was going to go/tried to go, but (no,) he came back.’ (Iwaidja Dictionary)
- (65) *wurrkany awukung ba walij rardudban (Iwaidja)*
 FRUST 1sg>3sg.ANT-give-ANT DETfood 3msg>3sg.ANT-leave.behind-ANT
 ‘I tried to give him food but he left it behind.’ (Author’s fieldwork)
- (66) *niwan-juru ngada nginja wiridi-j (Kayardild)*
 him-PROP 1sgNOM FRUSTR stay-ACT
 ‘I waited around for him for nothing (he didn’t turn up).’

These examples involve (a) a modal particle with (b) a future/present irrealis or indicative past inflected verb, (c) offering at least one modal/evidential reading on top of an avertive reading.⁶⁷ The latter property is key to treating them as irrealis-avertive periphrases rather than (dedicated) avertive particles. In these four languages except Kunbarlang (the Kunbarlang *V-IRR.PST* synthetic irrealis seems not to have avertive readings (anymore?)), periphrastic irrealis-avertives co-exist with non-periphrastic irrealis-avertive forms (the *IRR.PST* paradigm in Iwaidja, the *V-IRR* form in BNG, and the *POT* inflection in Kayardild). In these three languages (and not in Kunbarlang),⁶⁸ periphrastic irrealis-avertive inflections logically are the *marked* members of these complex irrealis systems.⁶⁹ I believe this partly explains an important contrast between synthetic, vs. (negative) particle-based irrealis-

⁶⁷ *Wurrkany* + *V-FUT/IRR/PST* can have evidential, proximative, volitional and avertive meanings in Iwaidja; in Kayardild, *nginja* + *V-ACT* can have past irrealis deontic readings (‘should have’), as well as avertive readings (‘tried and failed’). In addition to this, *jginja* + *V-FUT* can have negative predictive (‘won’t’) readings.

⁶⁸ *Yimarnek* + *V-IRR.PST* Kunbarlang utterances seem to require a reduced negative clause construction to receive their full avertive reading – this suggests the periphrastic inflection has grammaticalized further, i.e. is less a markedly avertive form, and might be on the verge of replacing *V-IRR.PST* as the general past irrealis – proof of this can be found in the fact that only the periphrastic form seems to have proximative/volitional meaning; its modal range of meaning is in fact already larger than that of the synthetic *V-IRR.PST* form.

⁶⁹ Unsurprisingly, the Kayardild *nangarra* monofunctional avertive inflection also seems to semantically encode avertivity; judging from the examples given by N. Evans, it is unnecessary to strengthen the implicature *via* a subsequent clause.

avertives: the former seem to encode averitivity as a mere implicature, while for the latter, we are dealing with clearly semanticized meanings. Jaminjung examples (28) vs. (29) are a perfect illustration of the implicature status of the avertive reading associated with most synthetic past irrealis-avertives; context can defeat the ‘failure’ implicature (as is clearly the case in the latter example) in many languages endowed with such forms.⁷⁰

But besides being a marked form, all the above periphrastic irrealis-avertive inflections incorporate a particle whose meaning is counterfactual/similative, or at least negative (e.g. ‘not what is seems’). This, I will argue, largely explains why these forms convey descriptions of negative past events. In contrast, synthetic irrealis avertives seem to have (at most) negative implicatures; this also partly explains why they have developed negative past event meanings.⁷¹ Possessing an overt negative content is, we will see, a necessary ingredient of *bona fide* semantic avertives. This explains why Kayardild stands out (again!) for possessing the only clearly semantic avertive based on a synthetic inflection, namely NEG.POT under its negative capacity reading. See (67), which effectively means that a vain attempt at finding (and killing) someone took place.

(67)[context: ‘them mob’ try to find someone so as to spear and stab him]

kaba-nangku,	kuru-lu-nangku	niwan-ju	(Kayardild)
find-NEG.POT	dead-FAC-NEG.POT	3sg-MPROP	
‘But (they) couldn’t hit home, couldn’t kill him.’			(Evans 1995: 581)

⁷⁰ This being said, depending on languages, it is not always easy to get speakers to accept such cancellations of failure implicatures; in Iwaidja, my own fieldwork suggested that many speakers harbour at least a certain hesitation to accept a non-failed reading of an IRR.PST-marked avertive.

⁷¹ Although want of space I cannot really elaborate on this, it must be said that the sample contains datapoints strongly suggesting that the NEG+V-IRR.PST pattern (column #6) often conveying negative past events, derives from the extension of an entailment attached to the negation of a proximative-volitional modal base (cf. English (originally volitional) past irrealis *would*, where ‘X wouldn’t V’ entails ‘X refused to V/didn’t V’). In Gooniyandi, negative past event entailment readings are attested with a negative (volitional) irrealis past (NEG X V-IRR.PST = ‘X refused to/did not attempt to V’), cf. (McGregor 1990: 535). It seems to me very likely that the negative past event readings of NEG+V-IRR.PST in other languages derives from the generalization of originally negative volitional entailments, to non-agentive verbs (again, see English *would*, as in ‘the knife wouldn’t cut’), so that from ‘X refused to V’, these utterances came to mean just ‘X didn’t V’.

Had all of these forms been intrinsically, semantically negative from the onset (i.e. had they meant something like ‘[X] didn’t want to V’), their combination with an additional negation might have proven troublesome for them to develop negative past event readings.

4.2 Avertive pattern #2 : dedicated affixes/particles/clitics + irrealis past or indicative past

Let us turn now to avertives based on a combination of a dedicated avertive particle (PART), plus an irrealis past (IRR.PST)- or past-marked utterance (columns #8 and #10 vs. columns #9 and #11 in Table 2). Patterns of this type are the second most predominant in our sample. Unsurprisingly, it is most salient in languages not possessing (or not fully possessing) the irrealis-avertive cluster – i.e. Pilbara, Arandic, Western Desert and Karnic languages of our sample. These particles seem inherently negative, and the associated avertive readings are fully semanticized, cf. e.g. the Western Desert *putu* ('can't/couldn't/in vain') particle, which combines with a derived INCHOative verb formed on a modal noun (through the nominalizer *-kitja-* INTENT) (68), and the Warlpiri *kula-nganta* (NEG+MOD) particle, which requires a Aux.FUT V-IRR complex irrealis inflection on the verb (and is fused with the AUX element). The latter avertive has clear negative evidential, 'mistaken thought/belief' readings ('things were not what they seemed'):⁷²

- | | | | | | |
|------|---|----------|-----------------------------|--------------|---------------------|
| (68) | ngayulu | putu | wangka-kitja-ri-ringa-ngi | | (Yankunytjatjara) |
| | 1sg(NOM) | IN.VAIN | talk-INTENT-INCHO-PAST.IMPF | | |
| | 'I wanted to talk with them in vain' (eg they wouldn't listen) | | | | (Goddard 1983: 131) |
| | | | | | |
| (69) | kula.nganta-kapi-rna | wawirri | panti-ka-rla, | (kala lawa). | (Warlpiri) |
| | NEG.MOD-FUT-I | kangaroo | spear-IRR | (but no) | |
| | 'I thought I was going to spear the kangaroo, but I didn't.' (Nash 1980: 239) | | | | |

V-IRR + NEG avertive patterns, i.e. constructions based on V-IRR irrealis-avertive inflections, are extremely common in our sample. They appear to be reduced forms of so-called 'adversative structures' à la (Malchukov 2004) (see also (Plungian 2001)'s notion of *antiresultatives*, which establishes a clear connection between avertives and biclausal adversatives). They differ from the latter in that the adversative clause is often reduced to a simple negative item standing for a whole negative clause – i.e. a reduced negative clause. How conventionalized these structures are is probably a matter to be discussed language per language. Note that reduced negative clauses abound outside of such avertive structures. They can express emphatic negation, when the previous clause is already negative; the second negation then reinforces the first ('not at all').

⁷² The first extensive description of such phenomena in an Australian language can be found in (Evans 1985).

NEG.SEEM-FUT-I kangaroo spear-IRR (but no)

‘I thought I was going to spear the kangaroo, but I didn’t.’ (Nash 1980: 239)

(75) thaddi thilmangga bijinyjarnirni (Gooniyandi)
mistakenly:believed early you:could:have:come (McGregor 1990: 498)
‘I thought you would arrive early.’

In some cases, the structure can also have a dynamic modal (generally volitional) avertive reading as well, see e.g. *mundjarra* in Gurr-goni (Burrara and Ndéjbbana offer similar datapoints (Green 1995: 315)), (76)-(77), and *maraka* in Biniñ Gun-Wok. It then counts as an instance of periphrastic irrealis-avertive in the survey.

(76) mundjarra. njina-boy-∅ ngayi-pu arrapu Daryl wurpu (Gurr-goni)
supposedly 1UAnfS-go-Irr2 IMin-Card and Daryl but.just
burrkburrk gu-me-ka.
bad.sickness 3MinA.31VO-get-Con
‘Daryl and I intended to come (yesterday), but he got sick.’ (Green 1995: 314)

(77) mundjarra gabi police station mu-yo-rri+rni (Gurr-goni)
supposedly Loc police station 3IIS-lie-Irr I
‘It was supposed to lie at the police station (said of a dead body which people had expected would be flown to Maningrida, but which was flown to an outstation instead).’ (ibid., p. 315)

Finally, note that contrary to the doxastic/evidential avertive meanings we just discussed, more straightforward ‘flouted expectations’ readings like (78) can be expressed by ‘bare’ irrealis-avertives, without additional particles; in this instance, some (past) expectation of the speaker turns out not to be met. And in spite of what one might think at first sight, such readings are not really epistemic. They are instances of a non-epistemic,⁷³ dispositional type of necessity meaning (‘according to contextual (agents’ known habits, etc.) and non-contextual constraints (social/physical laws), it was necessary (and therefore predicted) that situation *s* should come to hold – but it didn’t’). I will regard such readings as cases of *predictive necessity* – which encompasses e.g. physical and social necessity. Such a reading is routinely conveyed by *should* in English.⁷⁴ I will call such patterns *predictive* avertives, but

⁷³ Such utterances do not imply that a certitude by an actually ignorant speaker turned out not to be verified, but that there are *practical* (physical, social) forces at play rendering a particular situation necessary. In this instance, it clearly inferred that something hampered them.

⁷⁴ Note that a weaker, non-necessity modal wouldn’t have been strong enough for its non-realization to be significant.

will leave a more thorough theoretical characterization of their modal nature to future investigations.

(78) ya-la-(rr)-DI-na-da	mabu	(Nyikina)
lmsg-IRR-(nmin)-sit-past-HABIT	good	
‘we should have been good (but we weren't)’		(ibid., p. 281)

4.3 Avertive pattern #3: imperfective/REDuplication based patterns (with or without additional markers)

Let us turn next to the two main classes of indicative avertive structures I identified: imperfective or imperfective-like (based on morphologically marked (by reduplication, or special inflections) or contextual iteration), and perfective indicative avertives.

Imperfectives in many Australian languages have pluractional readings, cf. e.g. Yankunytjatjara, and frequently crop up in contexts where the speaker insists on the fact that some agent made a protracted but vain attempt, cf. (79); they are then instances of proximative/volitional-avertives (the agent’s desire is highlighted). And in addition to simple iterated avertives, habitual avertives are also possible in Yankunytjatjara, cf. (80).

(79) kaa-na	Kanytji-nya puṯu	tjapi-ningi (Yankunytjatjara)
CONTR-lsg(ERG)	Kanytji-ACC IN.VAIN	ask-PAST. IMPF
‘And I kept asking Kanytji to no avail.’		(Goddard 1983: 62)

(80) papa-ngku puṯu	ritji-milal-payi,	puṯu	wawani-ma (Yankunytjatjara)
dog-ERG IN.VAIN	reach-LOAN-CHAR	IN.VAIN	jump.up.on hind legs-IMP.IMPF
‘But dingoes couldn’t reach them, they’d dump up on their hind legs to no avail.’			

Verb reduplication combined with indicative past tense (or contextually indicative past tense) marking is another recurrent imperfective-like, proximative/volitional-avertive pattern found across both non-Pama-Nyungan (Iwaidja, Bininj Gun-Wok, Nyikina) and Pama-Nyungan languages (Kayardild, Bilinarra, Ngarla,⁷⁵ Arrernte), cf. (81)-(83)(82) – and it is likely to be more widespread than shown by this grammar mining study, even in our sample. V-reduplication can be regarded as a near-imperfectivizing device, as the tenses involved are often aspectually underspecified; the result is very close to the meaning of a *bona fide*

⁷⁵ Cf. Ngarla *nguru~nguru* ‘almost immersed’ (Westerlund 2015: 165).

dedicated avertive negative particle endowed with a ‘tried (in vain)’ negative meaning in the past, cf. e.g. *ngarla* in Ngaliwuru (a dialect of Jaminjung) (84),⁷⁷ or, more commonly, a semantically negative avertive particle such as *pilyparr* (‘in vain’) in Ngarla (85). A second subtype of indicative past avertive pattern involves a proximative-irrealis, *de facto* semantically negative proximative particle with a ‘nearly/almost’ meaning, cf. e.g. *walyi* in Ngarla (86).⁷⁸ And finally, a third type is illustrated in the sample (again) by *putu* (‘can’t’) in Yankunytjatjara (87), which can combine with the perfective past tense to produce avertive meanings (it is worth recalling that Ngarla possesses a ‘for nothing, for no reason, unwillingly’ *purtu-karri* particle, which is obviously derived from a related *purtu/putu* particle, as we will see in the section dedicated to development paths).

(84) *yugung gan-jib-unga-nyi*, (...), *ngarla wilng nga-ngu* (Ngaliwuru)
 run 3sg:1sg-POT-LEAVE-IMPF TRY stay.back 1sg:3sg-GET/HANDLE.PST
 ‘he was going to run away from me, (...) but I tried to hold him back’ (Schultze-Berndt 2000: 479)

(85) *pilyparr ngaja yarni+ma-rnu pirrjarta.* (Ngarla)
 unsuccessfully 1SG.ERG repair[+CAUS]-PST vehicle
 ‘Unsuccessfully I repaired (the) vehicle.’ (I.e. ‘I failed to repair the vehicle.’) (Westerlund 2015: 75)

(86) *nyinta walyi wakurr ja-rnu ngunyi karlajangu.* (Ngarla)
 2SG.ERG almost secure CAUS-PST DEM (distant) cattle
 ‘You almost had that cattle (i.e. cow/bull) secured (i.e. yarded up).’ (ibid., p. 175)

(87) *wati tjilpi-na ampu-ra pakal-tjinga-nu,* (Yankunytjatjara)
 man old.man-ACC hold in arms-SERIAL get up-CAUSE TO DO-PAST
putu paka-ntja-la
 IN.VAIN get.up-NOML-L0C
 ‘I helped the old man get up, because he couldn’t get up (by himself)’. (Goddard 1983: 230)

Finally, a number of combinations of proximative adverbials, particles, clitics and prefixes or suffixes meaning ‘almost, nearly’, also appear in the sample, cf. e.g. *wanji* in Iwaidja, *klosap*

⁷⁷ Note that like (29), (84) offers an instance of a non-avertive, proximative reading of a verb (*gan-jib-unga-nyi*) in the POT-IMPF (IRR.PST) inflection; it also illustrates that avertive meanings are contextually determined for such polysemous inflectional forms).

⁷⁸ Nyangumarta, a related Pilbara language, possesses two similar (indicative) avertive particles: *partal* ‘in vain’ and *katu(rr)/kartungurru* ‘nearly’, cf. (Sharp 2004: 133, 181).

Interestingly, while the weak tense is the least temporally specific in Anindilyakwa (REAL-V- \emptyset), the reverse holds true in Kayardild (-ACT is aspectuo-temporally underspecified, but is a ‘strong’ perfective tense); so underspecification plays not part in determining weak vs. strong perfective readings of tenses. The main parameter bringing together these above weak perfective tenses, I believe, lies in their still being *relative/content dependent* to some extent:⁸¹ ACT (in Kayardild) and REAL-V- \emptyset still behave as *dependent, relative* tenses in some respects (and initially were fully relative tenses). Indeed, in Kayardild, ACT cannot mark past subordinate clauses (Evans 1995:261) – only PAST can. Similarly, the temporal interpretation of REAL-V- \emptyset subordinates or ‘chained clauses’ in Anindilyakwa depends on that of their matrix clause, whereas that of REAL-V-PST subordinates / ‘chained clauses’ does not (Bednall 2019). Historically, both tenses can be reconstructed as deriving from former relative tenses (Mark Harvey, p.c., and see Evans 1995).

Before closing this subsection, it is important to note that bare PC structures (89) and generally discourse-dependent PCs (92)-(93) (‘pragmatic’ PCs, column #14), differ crucially from both other avertives of the sample, in that (i) they do not contribute a negative event contradicting an attempt/belief/expectation *per se*, and are utterly deprived of any inherent modal-evidential content (those are at best instances of ‘free’ pragmatic enrichment) and therefore (ii) they do not describe complex event structures, a part of which is modalized. In other words, they are at best ‘weak’ avertive strategies.⁸² And I take conventionalized PC constructions with a reduced negative clause (column #13) as bridging the gap between pragmatic PCs and *bona fide* semantic avertives reviewed so far: I classify PC+NEG patterns as semantically avertive structures since they encode a negative event; but they lack the modal-evidential content associated with other types of (semantic) avertives. I will come back to this crucial fact in my theoretical conclusion below.

⁸¹ These tenses are classic cases of what N. Evans refers to ‘insubordination’ (Evans & Watanabe 2016)– or how a syntactically dependent tense came to mark matrix clauses – where the former dependent/relative tense has retained some of its semantic dependency. ‘Weak perfectivity’, I believe, is here preconditioned by this parameter. For a historical analysis of the Kayardild PAST along these lines, see (Evans 1995: 443); and Mark Harvey (p.c.) suggests that the Anindilyakwa ‘null’ inflection is historically derived from a former (relative) imperfective.

⁸² See (Müller 2013: 106) and (Kroeger 2017) for a similar conclusion, based on related premises.

4.6 Some key empirical generalizations about modal, aspectual, and actional and subtypes of avertives

The data discussed so far demonstrates that many avertives structures, marked or not with an irrealis-avertive inflection, come in different modal flavors: predictive / proximative ('was going to V / would have V, but didn't' – where V is typically a non-agentive verb), predictive necessity ('X should_{physical/social/dispositional} have V, but didn't'), volitional ('X wanted to V/tried to V, but didn't'), capacitative ('X could have V/tried to V, but didn't') and deontic ('X should have V, but didn't'). I will call 'reproachatives' the latter type of deontic avertive avertives (cf. (Olmen 2018); see also 'admonitives' in (Harvey 2002)); they describe failures to meet a past obligation, and are typically used to blame an addressee. Doxastic and evidential avertives ('X thought that P/it seemed to X that P, but it turned out that non-P') are also attested in the language sample, though not for 'bare' irrealis-avertive inflections – they require additional particles. This suggests that avertives in Australian languages can have both a dynamic and a non-dynamic modal basis; at least some avertive structures turned out to be capable of both dynamic and non-dynamic modal (including evidential) readings ; see (73)-(77). All in all, this suggests that in Australian languages (i) both dynamic and non-dynamic modal meanings can underlie avertive structures, and that (ii) non-dynamic vs. dynamic modal structures can be conventionalized separately, or not, though there seems to be a tendency for them to appear in separate constructions.

Last but not least, another important generalization w.r.t. modality should complement those put forth above: non-avertive irrealis meanings i.e. non-avertive deontic, conditional and hypothetical meanings, all typically associated with forms pointing to the irrealis avertive cluster, do not seem to be associated with doxastic/evidential avertive structures involving an evidential/doxastic or capacitative meaning; even volitional and proximative meanings can be absent from some avertive forms, which are clearly much less polyfunctional than those typical of the irrealis-avertive cluster. This is strongly indicative of the existence of seriously diverging development paths for avertives in Australian languages. It points to at least two distinct sets of development paths: one broadly related to the irrealis-avertive cluster, and one broadly related to evidential/doxastic meanings. I will get back to this issue later in the paper.

Let us now turn to aspect. I will not discuss here in great detail the various aspectual subtypes of avertive meanings (cf. §2.2) exhibited (or not) in the sample by each of these patterns, mostly for want of a sufficient number of datapoints to effectively be able to do so.

But based on language where data is most abundant, it seems that the following generalizations hold (they extend beyond the irrealis-avertive cluster):

1. averitive structures, regardless of their nature, require dynamic, non-stative verbs; if they occasionally do combine with stative verbal roots, then these receive a change-of-state interpretation, typically with the addition of a so-called ‘inchoative’ derivational affix (whether they then describe a bounded or unbounded change-of-state does not matter)
2. proximative/imperfective-related avertives in Australian languages tend to have either a full event / preparatory stage averitive reading (‘X wanted / was going to V’; prospective/proximative aspect) or inner stage averitive reading (‘X was V-ing, but did not finish V-ing’), but not a result stage averitive reading (‘X V-ed, but expected results did not obtain’). I will claim that this is a predictable consequence of the fact that the verb’s underlying event predicate cannot culminate, due to the proximative/imperfective or iterative morphology involved
3. perfective avertives and PC-avertives in Australian languages tend to have any of the main aspectual types of averitive readings

The above generalizations are themselves aspect sensitive – thus atelic utterances cannot have ‘inner stage’ averitive readings (but they can have result stage averitive readings, cf. e.g., (66): activity utterances can be endowed with a lexically encoded ‘telos’/result stage, cf. e.g. ‘X look for something’, ‘X wait for someone’, ‘X watch something’, etc.)⁸³, and perfective achievement utterances can only have full event or result states averitive readings.

Finally, let us consider the actional parameters underlying avertives in the sample. I did not find clear evidence for a principled distinction between ‘subject-controlled avertives’ (i.e. frustratives in my terminology) and ‘non-subject controlled avertives’, both within and without irrealis-avertive cluster-type languages. Inflectional, pragmatic avertives in the sample did not seem to be biased towards either of these two readings – though of course, volitional-leaning interpretations were mostly restricted to animate subjects; in the absence of

⁸³ Hale (1969:208) offers similar activity-based examples (e.g. ‘look around for’), which must possess a lexically encoded telos/goal (e.g. a ‘find’ event description in the case of ‘look for’); but even if they don’t, it seems that some agent-controlled activities can be contextually enriched with such a telos.

a controlling subject, a predictive/proximate reading seems to prevail, and the associated private state is ascribed to the speaker, and/or some contextual judge (this is particularly obvious for irrealis-averatives with an evidential, ‘not what it seems’ meaning). The actional semantics of particle-based averatives is often more delicate to assess, in the absence of sufficient data. This question, therefore, will have to be settled by future research.

5 Conclusion: theoretical consequences of the areal typological survey

I must now come back full circle, and attempt to answer my initial research questions: are positive versus negative utterances separated by a clear ontological split, or do averative structures somehow bridge the gap between actual and inactual events? And what can it tell us about how the human mind (as evidenced by linguistic systems), structures time? I will first focus on so-called averative development paths in Australian languages (§5.1), before striving to identify important theoretical consequences of this study for our understanding of averatives as a general linguistic category, and beyond that, for a theory of time as structured event descriptions (§5.2). I will then proceed to drawing some possible consequences for a socio-culturally enriched approach to human time, before concluding the paper (§5.4).

5.1 Development paths and semantic/pragmatic underpinnings: where do averative come from, and how are they structured

5.1.1 From imperfectivity-proximativity to averativity: the predominant set of development paths for averativity in Australian languages

As we have seen, numerous proximate-leaning elements (imperfective or modal morphology whose meaning can be proximate ‘be about to/be going’, ‘almost, nearly’ affixes, clitics, particles or adverbials, reduplication,) appear in averative constructions. Could those different classes of proximate patterns have followed related development paths – in the sense of (Bybee, Perkins & Pagliuca 1994) –, with or without a *bona fide* imperfective content? If that is the case, then a vastly predominant family of closely related development paths emerges from our areal study.

The fact that proximate-averative constructions appear with both perfective and imperfective morphology (and marginally with modal, irrealis inflections, cf. the *kuyin*- preverb in BNG), is strongly suggestive that imperfectivity *per se* is not a necessary ingredient of the development path. Having a well-known ‘part-of’ semantics (cf. e.g. (Altshuler 2014) for a straightforward formal analysis of imperfectives along these lines – but the idea is fairly

ancient; for the Romanist tradition, it dates back at least to G. Guillaume’s work (Guillaume & Vassant 1992)), it has often development proximative (‘be about to’, ‘be going to’) meanings crosslinguistically, and these essentially quantitative expressions (‘was at a point near completion/inception/obtention of results’ (imperfective), or ‘came close to completion/inception/obtention of results’ (perfective)) are avertive, regardless of the viewpoint involved: both indicate that some element in the full development of a completed event (the event as a whole, its culmination or its results) is somehow lacking. This would give us two related, partially overlapping development paths, (95)-(96). The shift from a non-proximative past imperfective, to a proximative/volitional one corresponds to a modal enrichment of the inflection, and can only arise if it is compatible with telic verbs (see the Murrinh-Patha past imperfective for an instance of imperfective inflection incompatible with telic verbs, and logically lacking a proximative interpretation). I will hypothesise that is a consequence of telic verbs possessing a sublexical modal content, of a teleological/volitional type, which becomes singled-out by the proximative meaning extension.

(95) The past tense + proximative development path

Past tense + proximative adjunct (‘almost, nearly’) > past avertive-counterfactual (CF)

(96) The (past) imperfective/proximative to avertive development path:

Pst.impf. > Pst.impf/proximative/volitional > prox./volitional/irrealis+avertive implic.

I am arguing here for a type of evolution conjoining two types of mechanisms. The first is meaning accretion, that is the coexistence of ancient vs. novel meanings at some evolution. This corresponds to ‘layering’ à la (Hopper 1991), or a *bridging context* à la (Heine 2003).⁸⁴ (96) means that I’m arguing that the original past imperfective meaning of an inflection was shed *after* when it developed into a form possessing at once proximative, volitional, irrealis and avertive meanings – which, of course, corresponds to Northern Australian irrealis-avertive cluster. This hypothesis is supported by independent diachronic analyses for some languages in the sample, as at least some irrealis-avertive non-Pama-Nyungan paradigms can

⁸⁴ Note that if the volitional/proximative ingredients came to vanish, this could lead to the formation of a narrower irrealis-avertive – and with further shedding, to a pure avertive or irrealis (such as I think, the Kunbarlang past irrealis, which does not seem to have proximative/volitional or avertive readings). This would be a case of *switch* in Heine’s theory; cf. also path (95), where the second stage illustrates a switch case à la Heine.

be reconstructed as derived from former imperfective paradigms, as in e.g. Gunwinyguan⁸⁵, or in Maningrida languages.⁸⁶ Furthermore, I believe the past imperfective path proposed above is in line with diachronic-typological work such as (Sansò 2020) (see in particular the ‘be’ development path).

It should also be stressed that (95) differs crucially from (96) in that the former has an at-issue negative semantic content, whereas the latter merely has negative implicatures/entailments (or possibly presuppositions – I am leaving this question open) attached to it. The development of counterfactual/negative event description meaning from proximative adjuncts is already well-known from the history of English (Ziegeler 2000; Ziegeler 2015), and similar evolutions might very well have taken place in Australian languages. Furthermore, treating the negative import of (96) as a matter of non-at issue content is consistent with the widely held view in the literature that past irrealis forms have negative entailments, implicatures or presuppositions at most (Ippolito 2003; Ippolito 2006; Arregui 2009), including the Australianist literature (Verstraete 2005; Verstraete 2006; Linden & Verstraete 2008) – not downright, at issue negative content. This also explains why such avertive pragmatically construed meanings (in effect ‘avertive strategies’) contrast with those ‘marked’ avertive constructions in the irrealis, involving additional, overt negative elements (avertive/proximative particles, or reduced negative clauses) in this respect.

If the two development paths put forth above are correct, then it follows that proximativity always has potential for an avertive-irrealis development regardless of the associated aspectual viewpoint, because it can always lead to a counter-to-fact, negative enrichment – this is consistent with independent typological regularities (cf. e.g. the development of some Romance conditionals from imperfectively-marked modal constructions, or the Romanian dedicated avertive construction *a fi pe cale* (Pahonțu forthcoming), which admits both perfective and imperfective marking⁸⁷).

⁸⁵ As noted in (Alpher, Evans & Harvey 2003: 312; Kapitonov 2019: 173), the predominant Gunwinyguan past irrealis paradigm /nij/ can be reconstructed as past imperfective.

⁸⁶ (Green 1995: 195 ff.; Green 2003: 399) reconstructs the Gurr-goni irrealis inflection *-ni* as derived from a proto-Maningrida root **ni/*nu* ‘sit’. ‘Sit’ being a notorious copula in Australian languages, (Sansò 2020: 416, n. 6) argues that it most likely developed into some progressive (with proximative uses), and from there, into an irrealis. It should be noted, furthermore, that *-ni* sounds very much like a common pan-Australian root for ‘sit’, and that several past suffixes possibly derive from it (cf. e.g. Anindilyakwa, Jaru, Ngarla).

⁸⁷ It is my belief that *a fi pe cale* has just entered a bridging context phase (Heine 2003) between the two stages of (95).

Reduplication/iterative morphology, which we have seen to be frequent in our inventory of imperfective-proximative avertive patterns (§4.3), requires two sub-development paths given in (97): the general reduplication/iteration type (1) branches out on the more general imperfective pattern, while the inceptive-reduplication type (2) behaves more like a proximative adverbial like ‘nearly’.

(97) The reduplication/iteration to avertive sub-development paths

1. Reduplication/iteration > proximative/volitional (‘keep trying’) > ...
2. Inceptive reduplication > proximative > avertive-counterfactual

While reduplication and iterative morphology has so far not been mentioned as a major source of avertive markers cross-linguistically *via* the proximative/imperfective path, it seems to be widely attested across languages of the world. For the Americas, see e.g. (Hintz 2011: 68–69) for related datapoints in Quechua; (98) is a clear example of reduplication-based avertive structure in (South Conchucos Quechua). For Europe, see e.g. Moksha Mordvin, an Uralic (Mordvinic) language, which possesses an avertive (‘almost’) suffix derived from an iteration/habituality suffix (Kozlov 2019: 133), and Russian, where instances of reduplication strikingly reminiscent of a similar inceptive-avertive reduplication pattern can be found (99).

(98) tsa cha-yka-mu-r-qa qechu-na:llapa-n mu:la-n-ta. (South Conchucos Quechua)
 that arrive-PFV.O-FAR-SS-TOP take.force-PST.N all-3 mule-3-OBJ
 wanu-tsi-ypa wanu-na:
 die-CAUS-ADV die-PST.N (Hintz 2011: 74)
 ‘Then when he arrived, he took away all of his brother’s mules and tried to kill him (in any way possible).’

(99) Sneg tajal, tajal, no ne rastajal. (Russian)
 Snow melt.impfv.past melt.impfv.past but neg melt.pfv.past
 ‘The snow started to melt but did not melt away completely.’

5.1.2 *A note on volition and other modal bases in the Australian irrealis-avertive development paths*

As shown by column #5, most irrealis-avertive inflections must incorporate a volitional interpretation in their development path. This connection between volitionality and avertivity is hardly a surprise, as the volitional development path of avertives is well-known from (Kuteva 1998)’s seminal paper; it is crosslinguistically abundant, in Europe, in Africa, and in

can be stage-level, non-permanent states as well (cf. the related notion of ‘action dependent ability’ in (Mari & Martin 2009)) – a perfect fit for a change-of-state, avertive interpretation. In an utterance like (87), I take the ‘couldn’t’ rendering of *putu* as an illustration of such a failed, deliberate/volitional exertion at realizing such an ‘action dependent ability’.

And of course, what I have called reproachative avertives (§4.6) (‘you should have V [but you didn’t]’) being related to deontic, i.e. priority modal meanings (Portner 2018), they are potentially deeply connected to volitionals (cf. ‘I want you to V’ = ‘you must V’), and could be part of a semantically extended path encompassing (101).

5.1.3 *The similitive/evidential development path*

The last major grouping of development paths I would like to propose involves similitive counterfactual (‘like’) expressions, and in general forms possessing, or having developed a negative predictive/evidential/doxastic content, cf. *yimarne(k)/yimanke(k)* in Bininj Gun-Wok and Kunbarlang, particles *djangagogo* and *djaying* in Bininj Gun-Wok, as well as Warlpiri particle *kula-nganta* (NEG+SEEM), the related Gurinji *-nganda* suffix (probably related to the ‘dubitative’ =*nga* clitic in Bilinarra), and Kayardild particles *nginja / maraka*. The avertive structures in which these markers appear convey negative modal meanings, and generally reflect on thwarted expectations and unjustified beliefs (plus some other modal meanings for some of them, e.g. *maraka*).

Many of these expressions derive from roots/affixes/clitics whose original meaning was ‘like’/‘seem/not what it seems’. They sometimes incorporate an overt negative element – as in Warlpiri.⁸⁹ These forms frequently aggregated negative evidential-doxastic meanings (‘not what it seemed to agent/what agent believed’), occasionally mirative meanings (Delancey Scott 2012), and capacity meanings (‘can’t’ / ‘couldn’t’); I will not attempt to account for the latter fact, and will focus on the former, as a negative capacity meaning could also be robustly associated with negation in some languages.⁹⁰ Thus, the *kula* negation, common in Ngumpin-

⁸⁹ Note that Djaru, another Ngumpin-Yapa language, possesses a related negative evidential particle *kulanga* (Tsunoda 1981: 205).

⁹⁰ See also *putu* in Yankunytjatjara (and Pintupi-Luritja, James Gray, p.c.). But unlike other particles evoked here, it does not have evidential undertones; instead, it could reflect on a negative modal capacity and/or volitional development path – the related Ngarla word *purtukarri*, which can convey both negative capacity and volition (‘unwillingly’), strongly supports such an hypothesis. Cf. §5.1.2 above. It could also be that the type of association between negation and capacity exhibited by *putu* and other particles being recurrent across certain language families, has prompted other, originally similitive negative particles (e.g. *kula*) in other, neighboring language families, to become endowed with a negative capacity meaning, through language contact. I will leave this as an open issue for future research.

Yapa languages, seems to be imbued with a negative capacity meaning, as is evidenced from its uses in Jaru and Walmajarri (McConvell & Laughren 2004: 163–164).

Let us take an example to better identify this other, novel path. *Yiman* is a similative element in Bininj Gun-Wok; similatives easily develop into negative expressions, such as past irrealis/counterfactuals, and indeed, avertives (for a straightforward illustration, see the evidential and irrealis/modal evolution of *like* ('X's is like P') in Modern English, cf. 'as e.g. (Pinson 2020), or *as* ('as if')); this gives us the development path (102). In our sample, one can also mention the Kayardild *maraka* 'counterfactual, mistaken thought, evidential ('looked like'), which is also originally a similative, 'like' particle,⁹¹ cf. e.g. entries *bilulurlda*, *jurdungaji* and *kabanda* in (Evans 1995: 652, 692, 693).

- (102) Development path from similatives to evidential/irrealis/avertive/mistaken/thought
- > (positive/neutral evidential) : seems P (and is/might be P)
 - like P > (negative evidential) : seems P but is not P > evidential
 - > ... > irrealis/avertive/mistaken thoughts

The above development path seems quite common in Australia, as similative-derived avertives are abundant, cf. e.g. the irrealis/avertive particle *karaddiabb(a)* in Nakkara (Maningrida), derived from *djabba* 'like', (Eather 2011: 340–343), or the Pitta-Pitta avertive particle *wiri* ('like') (Blake 1979b: 220), a.o.⁹²

Finally, other particles and clitics such as *nganda* / *nga* (DUBitative) in Bilinarra and *nganta* in Warlpiri (all cognate, see also *nganda* in Gurinji) possibly illustrate a subpart (103) of the above development path, directly starting from a 'counter to expectation or belief/doubtful/not what it seems' meaning – cf. also *wurrkany* in Iwaidja ('not what it seemed'), which signals a negative evidential, unexpected turn of events⁹³).

- (103) The negative evidential development path ('not what it seemed'):
- > irrealis (from 'what seems' to 'what is')

⁹¹ See also the related Lardil particle *mara*, appearing with proximative-avertive meanings ('was going to V but didn't') with the FUT (= IRR) inflection, cf. (Evans 1995: 381).

⁹² I even suspect that similatives are in fact a very common source for avertives crosslinguistically, cf. (Creissels et al. 2007: 106) for an instance of a similative-derived ('like') avertive in Tswana, a Niger-Congo language.

⁹³ This is exactly what the Iwaidja dictionary mentions in its entry, and what R. Mailhammer and I found during field work explorations of the semantics of *wurrkany*.

(misleading) appearance)	>	counter to expectations/belief	>	avertive
			>	mistaken thought
			>	mirative

I must leave to future research the task of working out in finer details all those development paths, and some others I was compelled to omit for want of space to discuss them.

5.2 Consequences for a cognitive/semantic-pragmatic theory of averitivity, and our understanding of human time

5.2.1 Avertives as complex event descriptions, combining a positive and a negative event

If we summarize our findings so far, it appears that conventionalized averitive expressions convey at least two distinct event descriptions (#2 is optional with most avertives except PC + NEG structures such as (91)-(92), as it can be reduced to nothing, and be merely inserted under #1 as a never verified intention/expectation; and #1 is missing in PC+NEG averitive structures), one of which (#1) is endowed with a strong modal content:

1. a private cognitive state (intention – which turns out to be flouted/frustrated – or perception – which turns out to be mistaken (hence the connection between ‘mistaken thoughts’/evidentiality and averitivity, so striking in Australian languages with the irrealis-avertive cluster)), which are events in their own right⁹⁴
2. (an event fragment, or an event minus its desired/expected results)
3. a negative event (‘event didn’t begin/finish’, ‘results didn’t obtain/hold’), whose very assertion contradicts that #1 holds anymore.

This means that averitive structures convey *complex event descriptions*, i.e. must denote more than one event predicate. In addition, if it is correct, the above analysis very strongly supports the view that positive and negative events are not ontologically alien entities as avertives bridge the gap between them. They are the missing link between *bona fide* negative event descriptions (which, unsurprisingly tend to have averitive flavour through implicatures: given the right context, ‘he didn’t stay’ can easily implicate ‘I expected/hoped/wanted him to stay’) and positive event descriptions. In turn, this offers a decisive argument in favor of the

⁹⁴ This means I’m explicitly treating the modal content of avertives as contributing stative event descriptions. This is not an isolated or novel analysis of modals, cf. e.g. (Ferreira 2014).

hypothesis that negative events *are* legitimate objects for a linguistic ontology of time, at the very least – and most probably, then, for any ontology of human time, even at an abstract, philosophical level.

It should be furthermore noted that this important philosophical question (i.e. do negative events have ontological substance?), has independently received a similar answer on purely theoretical, formal semantic grounds in (Bernard & Champollion 2018); although I cannot develop a formal implementation here, I would like to stress that their treatment of negative events would be a perfect piece of machinery to include in such a treatment.

5.2.2 From avertives to actuality entailments: a negative type of eventualized postmodal modal meanings

The idea that positive and negative events are in fact, very much like ‘opposite brothers’ within an extended semantic family, receives further substance if we consider how avertives are actually part of a larger class of linguistic facts – a broader linguistic category, even. Following an idea first (to the best of my knowledge) put forth in (Caudal 2018b; Caudal 2018a), I believe that avertives cannot be well understood if one does not integrate them within such a larger set of linguistic phenomena and categorial domain, which I will call *eventualized postmodal meanings* (EPMs), or more simply, *demodals*. I define EPMS/demodals as a class of postmodal expressions (in the sense of (van der Auwera & Plungian 1998)) which convey complex event descriptions, comprising (a) a modalized event description (a belief, attempt, perception) paired up with and followed by (b) an event sanctioning either its failure/invalidity or success/validity – i.e. it can be a positive (in case of success/verification) or negative (in case of failure/falsification). I will hypothesize that avertives (except PC+NEG structures, as they are not modalized/not EPMs) form the negative (failure/falsification) side of the EPM coin, while so-called ‘actuality entailments’ (cf. (Bhatt 1999; Hacquard 2009), a.o.) form its positive side.

Thus, (104) (as well as (106)) corresponds to the positive counterpart of many ‘failed attempt’ avertives in Australian languages – and the addition of a negation unsurprisingly yields an avertive reading, (105) – whose semantics is very similar to some Australian negative capacity-related avertives, such as *putu* in Yankunytjatjara. I believe that (107) is the positive counterpart of what I have called ‘reproachatives’ (cf. §4.6). Such utterances are typically rendered in grammars by a past deontic modal followed by an elliptic negative clause (‘you should have V-ed, but didn’t’); I will argue that although they are semantically close to SAE past counterfactual deontics, they differ from them in that they are EPMs,

whereas *bona fide* SAE past deontics are not; they do not have any avertive flavor by themselves.⁹⁵

Additional evidence for grouping together AEs and avertives can be found in their relationship to epistemic modality. It has been frequently observed following Hacquard's seminal work on AEs, that AEs are limited to action modals, i.e. to modals requiring dynamic, non-stative event predicates (cf. e.g. (Hacquard 2009)). Such a fact is in line with the observation made above that avertives do not associate with epistemic modal meanings. I will get back to this issue further below, and provide a principled explanation.

(104) Il a pu partir. (French)
 He have.PR.3Sg be.capable.PP go-INF
 'He was able to leave.' (= he managed to leave OR was allowed to leave OR seized an opportunity and left)

(105) Il n'a pas pu partir. (French)
 He NEG.have-3sg.PR NEG be.able.to-PP leave-INF.
 'He failed/wasn't able/couldn't bring himself to leave.'

(106) Il a voulu partir. (French)
 He have-PR.3sg want-PP leave-INF.
 'He tried to leave (and failed)' (lit.: 'he wanted_{perfective} to leave')

(107) Il a dû partir. (French)
 He have-3sg.PR have.to-PP leave-INF.
 'He was compelled to leave'. (presupposes the agent's unwillingness to act)

The point just made above naturally leads to a central empirical and theoretical generalization concerning the relation between modality and avertivity. I have established that two main subtypes of modalized event descriptions, corresponding to two broad modal classes, are realized in the Australian data discussed above: dynamic modals vs. non dynamic. Most structures belonging to the first class give rise to an 'exertion', attempt reading, except what I have called reproachatives (based on deontic modal meanings), and are generally rendered using 'tried [in vain]' or 'couldn't/was unable to'; they are associated with capacity,

⁹⁵ What prompted me to adopt such an analysis was the somewhat bizarre abundance of seemingly unnecessary additions of 'but X didn't V' clauses in the glosses of many irrealis-avertive inflections in grammars. I wondered – why did informants feel the need for providing such translations? I now take it to be an indication that negative events are not a secondary type of meaning even when irrealis-avertive inflections have a deontic interpretation, but are part of the at-issue meaning of such utterances as well.

volitional/(agentive) teleological modal meanings (and again, deontic modal meanings for reproachatives). The second class is associated with mistaken thoughts/beliefs/perceptions (doxastic modals, evidentials), flouted expectations and perceptions (cf. negative evidential meanings ‘not what it seemed’, and what I have called ‘predictives’) and plain non-agentive proximatives (‘was about to but didn’t’, ‘nearly V-ed’) reflecting on a simple thwarted expectation. They occasionally have extended meanings crosslinguistically associated with such semantic categories, e.g. mirative interpretations (see §5.1.3), and of course, they never incorporate an exertion event. They can only associate with cognitive state event description, as they are not so-called ‘action modals’.

In contrast to conventionalized avertives, I have also established that many irrealis inflections have a merely pragmatic avertive effect, so that avertivity should be treated on several, distinct levels of a theory of meaning and time: in the semantics, or at the semantics/pragmatics interface; i.e. through different dimensions of meaning. Again, such forms should be contrasted with their re-entrant uses in more conventionalized avertives such as e.g. what I have referred to as periphrastic irrealis-avertive inflections (§4.1) (except in Kunbarlang), as they have a semanticized avertive content. An open theoretical question at this point is whether these semanticized, former defeasible implicatures, should be treated as conventional implicatures à la (Potts 2005; Potts 2007), i.e. using a multi-dimensional semantics, or as straightforward semantic content. This opens up further interesting avenues of research along the lines of several dimensions of meaning being associated with avertives.

Finally, I would like to stress that the pre-formal analysis sketched above significantly differs from existing analyses of avertives; I will here focus on two works in particular, but the central points developed here apply to others. In their account of the *cem* avertive in Papago, (Copley & Harley 2014) assume that accomplishment verbs are by default non-culminating in Papago (vPs do not encode a presupposition of efficaciousness, in their terms), unless some specific marker intervenes. Crucially, their analysis does not consider avertives as conveying complex event descriptions: they are not structures semantically contributing a negative event, nor does Copley & Harley’s account treat modal/evidential meanings (e.g. intentions/expectations) underlying avertives as event descriptions – those modal contents are straightforward, inherent properties of forces. I do not believe that in its present state, such approach can explain in a satisfying manner the modal/evidential complexity of the Australian facts at hand. Not ascribing a negative event content to semantic avertives (and *cem* avertives

are clearly semantic avertives) is particularly problematic in my view.^{96,97} The present theory also diverges from (Copley & Harley 2014) in that it does not consider that partitive culminations (PCs) should share with avertives their key semantic mechanism. I have argued above (§4.5) that PCs in Australian languages can only be a case of avertive strategy, distinct from *bona fide* avertives (my analysis is more in line with e.g. (Kroeger 2017)). If I am correct, then it is probably not desirable to assume that a non-efficacious culmination meaning should be the central mechanism underlying avertives, on top of PCs. But of course, this does not mean that a force dynamics-based account does not have its merits as well – merely that, in my view, it should be seriously enriched before it can be applied to avertives.

As I have already noted above, (Overall 2017)'s results are those which differ least from mine. In his paper, Overall argues that avertives are bi-propositional structures, with an inherent modal meaning, and crucially have a negative content, plus some salient aspectual properties; my own analysis can be deemed as structurally similar. A first obvious difference between our respective accounts has to do with the development paths Overall identifies for Amazonian languages; but as this might not be due to theoretical choices, I will leave the question aside for future discussion. Theoretically speaking, my analysis differs for the most part in that *pace* Overall, I argue that the modal dimension of avertives is not exclusively connected with the broad domain of epistemic modality – on the contrary, I have established that epistemic modality proper never gives rise to avertives in Australian languages, and that only ‘broadly’ epistemic modal meanings such as doxastic modalities, predictive necessity modalities and evidentials can do so. In sharp contrast to Overall’s view, my study has revealed that dynamic modal-related avertives (‘thwarted attempts’ of various types, and reproachatives) are just as important as non-dynamic-related avertives (flouted expectations / necessity predictions, mistaken beliefs and perceptions). Furthermore, it seems to me that many datapoints treated in (Overall 2017) as instances of (broadly) epistemic, expectations-based avertives, are in fact instances of deontic, i.e. *priority* modal avertives. This is notably the case of instances of reproachatives in his data: the *flouted expectation* (= flouted broadly

⁹⁶ Recall that possessing such negative event content justifies in my view that only PC+NEG constructions should qualify as semantic avertives – though not as EPMs.

⁹⁷ Conversely, I believe the ‘decessive’, ‘discontinuous past reading’ (‘X was P, but is no longer P now’) of the Papago avertive, should also be treated as involving a complex event description, with a positive sub-event entirely located in the past, and a negative event extending up to the present, and therefore that at least part of analysis developed here could apply to Uto-Aztecan facts. But it is difficult to say whether *cem* utterances have a strong modal content, i.e. whether or not they contribute EPMs – so I will leave this question open for future research.

epistemic modal meaning) interpretation Overall associates with reproachatives ('you should have done X, but you didn't') is in fact a mere *indirect* consequence of a more basic *flouted priority* (i.e. a desire inter-personally rated as a priority) meaning. And 'thwarted' volitional avertives found in his data certainly cannot be treated as flouted expectations, at least not for human agents:⁹⁸ 'X wanted to V' does not implicate *a priori* that X's desire was expected to come true. These cannot be regarded as related to epistemic modality; they clearly belong with dynamic modal meanings.

The absence of strictly epistemic avertives in the data here studied is also an interesting fact, and I think it is somehow related to another observation made about actuality entailments (AEs) following (Hacquard 2009), namely that forms with an epistemic modal meaning do not seem to give rise to actuality entailments. The explanation I would to propose is the following: avertives and AE are naturally at odds with the uncertainty associated with epistemic modal meanings, and are only compatible with epistemic-looking modals such predictive necessity, because it only makes sense to contradict or to verify a *necessarily predicted situation* (i.e., one whose necessity typically depends on social and physical laws, or e.g. agents' habits). This accounts for the absence of bona fide epistemic modal meanings for both positive (AEs) and negative (avertives) EPMs.

Finally, my analysis also contrasts with that of Overall in that it rather highlights the importance of *event descriptions*, and even ascribes an event description contribution to the modal content of avertives (beliefs/expectations/desires/(exertions of) abilities *are* (stative) events); it involves *complex event descriptions*, rather an underlying bi-propositional structure as advocated in (Overall 2017), and connects avertives with a negative event description, rather than a negated proposition.

5.3 (Possible) consequences for a socio-cultural theory of time

Before closing this investigation, let me add a few (speculative) considerations about some possible *social* implications of this survey for a theory of time; or how languages, as socio-cultural constructs, may reflect on certain long-term, social properties of said groups. Of course, one might endlessly (and pointlessly) speculate on the social meaning of such or such

⁹⁸ I would like to point out that in French, the volitional avertive construction *vouloir + INF* contrasts with the *vouloir + SUBJ* construction, in that the former (i) is avertive, and can have any type of subject whereas (ii) is non-avertive, i.e. indicates that the subject's desire was granted, and is very frequent with an 'omnipotent' subject (God, Destiny, etc.). And *vice versa* (ii) is an actuality-entailment construction, whereas (i) is not.

linguistic fact, but a few observations along these lines might still be relevant. And if not, then – just let me humour you for a few additional lines.

Avertives are essentially a category of ‘expectations/desires/beliefs gone wrong’, attached to thwarted attempts, near-events, partial events, or result-less events; they are frequently connected with so-called apprehensionals or aversives, as are past irrealis morphemes in general, crosslinguistically (Vuillermet 2018; Sansò 2020)– this is obviously a direct reflex of their negative orientation, i.e. they tend to involve undesirable turns of events. From a semantic point of view, they are forms expressing the limited cognitive and causal abilities of human agents with respect to Time seen as a flow of events. Given their extreme diversity in frequency in the grammar and lexicon of these languages (unlike in the languages of many culturally quite different groups, such as Western European languages and cultures), they might be imbued with a particular socio-cultural signification in the way said cultures envision time. Indeed, it is tempting to establish a link between their prevalence in certain language areas, their rarity in others, and the way time and the individual are (or were) connected in the historical cultures having given rise to said languages. Their abundance in Australia (and elsewhere) might tell us a story tell of cultures seeing the flow of time as very rarely corresponding to a human agent beliefs or desires; of cultures where Destiny is unknowable, and/or always has the upper hand, and tends to go against a woman’s or a man’s whim. Interestingly, hunter gatherers of Amazonia (and PNG) and Meso-American groups are the other known areas of the world where avertives are so widespread. And indeed, all seem to have in common this fatalistic, pessimistic view of the place of women of men in the flow of events (how erratic, violent and short life can be is painfully obvious among hunter-gatherers, but was also true in Meso-American societies, at least for the common woman and man)⁹⁹, i.e. in time, as acting an knowing beings. It might well be that for there is a connection between the omnipresence of avertives in the language born from cultures where Time is seen as a river in turmoil, full of unexpected meanders, and unforeseen (as well as

⁹⁹ The religious significance of *chance* as shown by e.g. the practice of ritual games deciding of the life and death of their participants in several Meso-American ancient civilizations (e.g. so-called ‘rubber ball’), is a clear indication of such a cultural fact; cf. e.g. (Reichard 2009).

fatal!) falls. Or to put it in a nutshell – that the Flow of Events is a cruel and unpredictable Trickster,¹⁰⁰ which does not care what we believe, expect and wish.¹⁰¹

Without necessarily supporting a classic Whorfian approach to the interaction between our perception of time and culture, it seems unlikely to be due to mere chance that avertive systems flourished among societies who shared such significant cultural attitudes towards time – i.e. among societies having preserved a ‘mythical’ conception of time, where human beings have little grasp over the flow of events; in other words, in societies where an individual’s intentions, perception and beliefs about the flow of time are so to speak essentially (and inevitably) flouted or delusional, and where one’s destiny seems culturally perceived as precarious.

Indeed, it seems intuitively obvious that culturally ingrained beliefs should permeate our perception and conception of time – in contemporary Western societies at least, said perception seems commonly imbued with the conviction that events are *agentively ordered* w.r.t. to causation, i.e., that there is human-mind like, organization of causes and effects (cf. the classical ‘argument from design’ in the organization of the universe,¹⁰² and the Leibnizian ‘watchmaker analogy’-based conception of time). Attributing an agentive direction to the organization of events in time is also a well-known cognitive bias in psychology, where the belief that things ‘happen for a reason’/need to make sense, permeates many ordinary thoughts.

Avertivity is obviously related to such a cognitive mechanism, but reflects on its complementary, opposite facet: namely that things *don’t happen* in line with human agents’ thoughts beliefs or desires, because the way time and events unfold can be *non-directed* at least from our limited, human perspective; it may even be (or seem) impacted by chaos (‘nothingness’) in a radical way.

¹⁰⁰ Interestingly, the ‘trickster’ ancestor (Crow or Moon, or both) is a strikingly widespread figure in Australian Indigenous myths, with a distinct chaotic nature. Unpredictable and ‘masked’, it is a figure of delusion and pretense, of random cruelty and pettiness; it ticks all the required boxes to be qualified as a mythical embodiment of avertivity!

¹⁰¹ And *vice versa*, while it seems that Australian languages are largely deprived of grammaticalized positive EPMs (especially those with a ‘managed to’ meaning), such constructions are tightly connected with inflections and/or capacity/knowledge modals in SAE. The double, inverse parallelism is intriguing.

¹⁰² Australian Indigenous myths do have their own mythical Creators, original sources of order in the world, such as e.g. the Carpet Python. But even as a law-enforcing mythological figure, it is unusually prone to erratic violence and chaos, to bouts of incontrollable fit and anger – far from the equanimous, impartial – though sometimes rigorous – figures of a soul-weighing God, as one can find in e.g., Christianity, Judaism or Islam.

5.4 The final word

From a strictly linguistic point of view, I have here attempted to show (hopefully without said attempt taking on an avertive turn!) that important semantic and pragmatic regularities are involved in the various types of avertivity found across Australian languages, and that these regularities have meaningful consequences for the cognitive architecture underlying the perception of time in said languages, and probably beyond. In particular, I hope to have established that avertives in Australian languages involve complex event descriptions. These, I have argued, should comprise a modalized, positive event description (a belief/expectation or a desire, and/or a fragment of a positive event description – either an *attempt* at realizing an underlying dynamic modal meaning, or an incomplete occurrence of an event if a non-dynamic modal meaning is involved). In addition, they should also comprise a negative event (underlyingly, the negation of the previously held belief/expectation/desire, the thwarting of the attempt made at realizing a desire, of an exertion at achieving a capacity). I have also claimed that together with so-called actuality entailments, who are their positive counterparts, avertives constitute what I have called *eventualized postmodal meanings*. In the survey of Australian languages, forms incorporating a semantically negative event description element (negation, or a dedicated avertive affix/clitic/particle or adverbial) were shown to be semantically avertive. They contrast with inflectional irrealis-avertive forms for which the negative event description (including the failure for result states to obtain) is essentially pragmatic, and context-dependent– cf. e.g. (30) (where context enforces a non-avertive reading of the volitional past irrealis). Several periphrastic avertives incorporating a pragmatically avertive inflection were shown to constitute marked/emphatic semanticized counterparts of said pragmatically avertive inflections; capitalizing further on this idea, I have also suggested that only semanticized avertives denote complex, modalized event structures of the type evoked above – this notably excludes partitive culminations.

But what of a philosopher's concerns for time? It is my hope that the above facts and their analysis, have shed novel light at least on semantic/pragmatic (i.e. linguistic and cognitive) dispositions specific to Australian languages for construing time – and beyond that, for languages in general, as I have attempted to highlight some crosslinguistic common points,

but also divergences w.r.t. avertivity.¹⁰³ Understanding the structuring properties of the human mind in its universality (as an abstract, cognitive organization), as well as its specificity (as e.g. is manifest in cultural systems, and possibly linguistic systems) is, I think, key to such an endeavor. A theory of how the ‘human mind’ relates to time, can only benefit from being linguistically-informed, and as such, will necessarily hover between language/culture-specific properties, and abstract, universal properties of language as a general human ability – and if not universal properties at least cross-linguistically/cross-culturally frequent properties. Indeed, even language-specific categories resort to more basic semantic primitives or contents, such as e.g., imperfectivity, perfectivity, iteration... – and despite important variations, these notions remain both *comparable* and *common* across languages. Such a view might not appeal to the philosopher primarily concerned with an objective, ‘all knowing’ perception of time. But a certain sliver of objective time *qua* actual history is not immune to a myriad *private state* entering the minds of agents; these, more than anything, determine human action the course of events in the world, and they can (and do) affect the structure of the tiny portion of the universe we occupy, at least to some extent (though not its temporal dimension as physical property). If we put aside the question of time as a purely abstract structure (or a dimension of the universe), then surely, a theory of time must pay attention to the way the human mind gives it substance – as history, as myth, i.e. as *narratives*. And the nature and organization of languages, standing at the crossroads between cognition and culture, very much determine the way we construe this other, decidedly *human* time. Last but not least, this paper has also been an attempt at providing a practical illustration of what I take to be an obvious desideratum for linguists and philosophers of language alike, namely that looking at rich, complex data originating in seemingly exotic languages, can be essential when trying to decipher theoretical questions of a certain importance and complexity. This, I believe, it all the truer with looking at such a central and thorny question as the identification of the properties of time w.r.t. to the human mind – insofar as linguistic systems can shed light on the latter, of course.

¹⁰³ I believe that even if we leave aside the issue of the negative events and their relation to positive events, evidence for such ontologically complex events are of obvious interest for any philosopher with at least a passing interest the semantics of tense and aspect, and its role in determining how the human mind conceives of time.

6 References

- Aikhenvald, Alexandra Y. 2012. *The Languages of the Amazon*. Oxford: Oxford University Press.
- Alexandrova, Anna. 2016. Avertive constructions in Europe and North Asia: An areal typology. Presented at the Chronos 12 (12th International Conference on Actionality, Tense, Aspect, Modality/Evidentiality), Université Caen Normandie.
- Alpher, Barry, Nicholas Evans & Mark Harvey. 2003. Proto-Gunwinyguan verb suffixes. In Nicholas Evans (ed.), *The Non-Pama-Nyungan Languages of Northern Australia: Comparative studies of the continent's most linguistically complex region*, 305–352. Canberra: Pacific Linguistics.
- Altshuler, Daniel. 2014. A typology of partitive aspectual operators. *Natural Language & Linguistic Theory* 32(3). 735–775.
- AnderBois, Scott & Maksymilian Dąbkowski. 2021. A'ingae =sa'ne “APPR” and the semantic typology of apprehensional adjuncts. In *Proceedings of Semantics and Linguistic Theory* 30, 43–62. Washington, DC: Linguistic Society of America
- Arkadiev, Peter. 2020. Grammaticalization by semantic enrichment: from progressive to proximative to avertive in Lithuanian. Presented at the SLE 2020, Online conference.
- Arkadiev, Peter M. 2019. The Lithuanian “buvo + be-present active participle” construction revisited. *Baltic Linguistics* 10. 65–108.
- Arregui, Ana. 2009. On similarity in counterfactuals. *Linguistics and Philosophy* 32(3). 245–278.
- Arregui, Ana, María Luisa Rivero & Andrés Salanova. 2014. Cross-linguistic variation in imperfectivity. *Natural Language & Linguistic Theory* 32(2). 307–362.
- Arunachalam, Sudha & Anubha Kothari. 2010. Telicity and Event Culmination in Hindi Perfectives. In Pier Marco Bertinetto, Anna Korhonen, Alessandro Lenci, Alissa Melinger, Sabine Schulte im Walde & Aline Villavicencio (eds.), *Proceedings of Verb 2010, Interdisciplinary Workshop on Verbs: the Identification and Representation of Verb Features*, 16–19. Pisa: Scuola Normale Superiore.
- Arunachalam, Sudha & Anubha Kothari. 2011. An experimental study of Hindi and English perfective interpretation. *Journal of South Asian Linguistics* 4(1). 27–42.
- Asher, Nicholas. 2011. *Lexical Meaning in Context: A Web of Words*. Cambridge: Cambridge University Press.

- Auwers, Johan van der & Vladimir Plungian. 1998. Modality's semantic map. *Linguistic Typology* 2(1). 79–124.
- Bar-el, Leora Anne. 2005. *Aspectual distinctions in Skwxwú7mesh*. Vancouver: University of British Columbia PhD Thesis.
- Bar-El, Leora, Henry Davis & Lisa Matthewson. 2006. On Non-Culminating Accomplishments. In Leah Bateman & Cherlon Ussery (eds.), *Proceedings of the Thirty-Fifth Annual Meeting of the North East Linguistic Society (NELS 35)*, vol. 1, 87–102. Amherst, MA.: GLSA (Graduate Linguistic Student Association), Department of Linguistics, South College, University of Massachusetts.
- Bednall, James. 2019. Temporal, aspectual and modal expression in Anindilyakwa, the language of the Groote Eylandt archipelago, Australia. Canberra / Paris: ANU & Université de Paris-Diderot PhD Thesis.
- Bernard, Timothée & Lucas Champollion. 2018. Negative events in compositional semantics. *Semantics and Linguistic Theory* 28(0). 512–532.
- Bhatt, Rajesh. 1999. *Covert Modality in Non-finite Contexts*. Berlin, Boston: University of Pennsylvania PhD Thesis.
- Blake, Barry J. 1979a. *A Kalkatungu grammar* (Pacific Linguistics : Series B, Monographs). (Ed.) Australian National University \textlessCanberra\textgreater. Vol. 57. Canberra: Pacific Linguistics, Australian National University.
- Blake, Barry J. 1979b. Pitta-Pitta. In Robert M. W. Dixon & Barry J. Blake (eds.), *Handbook of Australian languages volume I*, 183–242. Canberra: Australian National University Press.
- Bybee, Joan, Revere Perkins & William Pagliuca. 1994. *The evolution of grammar: tense, aspect and modality in the language of the world*. Chicago: University of Chicago Press.
- Campbell, Lyle. 2012. Typological characteristics of South American indigenous languages. In Lyle Campbell & Verónica Grondona (eds.), *The Indigenous Languages of South America*, 259–330. Berlin/Boston: De Gruyter Mouton.
- Carol, Javier & Andrés Pablo Salanova. 2017. Frustratives and aspect. Presented at the Symposium on Amazonian Languages II (SAL 2), UC Berkeley.
- Caudal, Patrick. 2005. Stage Structure and Stage Salience for Event Semantics. In Paula Kempchinsky & Roumyana Slabakova (eds.), *Aspectual Inquiries* (Studies in Natural Language and Linguistic Theory 62), 239–264. Dordrecht: Springer.

- Caudal, Patrick. 2011. Contribution aspectuelle des temps et de la phrase : des affinités électives ? In Sylvie Hancil (ed.), *Perspectives théoriques et empiriques sur l'aspect en anglais*, 11–52. Rouen: Publications des Universités de Rouen et du Havre.
- Caudal, Patrick. 2012. Pragmatics. In Robert Binnick (ed.), *The Oxford Handbook of Tense and Aspect*, 269–305. Oxford / New York: Oxford University Press.
- Caudal, Patrick. 2018a. De la théorie du sens, à celle des appariements formes/sens : synthèse de quinze ans de recherche sur le TAM(E). Université Paris-Diderot Mémoire d'habilitation à diriger les recherches.
- Caudal, Patrick. 2018b. Demodality: profiling a novel category at the tense/aspect – modality divide. Presented at the 13th International Conference on Tense, Aspect, Modality and Evidentiality (Chronos 13), Université de Neuchâtel.
- Caudal, Patrick. 2020a. From 'actuality entailments' to avertivity: on some postmodal meanings in French. Presented at the ALS 2020 (2020 Conference of the Australian Linguistic Society), Sydney. <https://als.asn.au/Conference/Conference2020>.
- Caudal, Patrick. 2020b. Coercion for the ages? A thousand years of parallel inchoative histories for the French passé simple and passé composé. In Martín Fuchs & Joshua Philipps (eds.), *Proceedings of LSA 2020 (94th annual meeting of the LSA)- Special Issue – Formal Approaches to Grammaticalization*, vol. 2, 51–66. Washington, DC: Linguistic Society of America.
- Caudal, Patrick, Robert Mailhammer & James Bednall. 2019. A comparative account of the Iwaidja and Anindilyakwa modal systems. Conference talk presented at the ALW2019 (Australian Languages Workshop), Camp Marysville, VIC.
- Caudal, Patrick & Eva Schultze-Berndt. 2016. Unusual possibilities? Exploring the Jaminjung modal system. Conference talk presented at the New Ideas in Semantics & Modeling 2016 (NSIM 2016), EHESS, Paris.
- Chávez, Margarethe. 2003. *I want to but I can't: the frustrative in Amahuaca*. Dallas, TX : Arlington: SIL.
- Chumakina, Marina. 2013. Periphrasis in Archi. In Marina Chumakina & Greville G Corbett (eds.), *Periphrasis: the role of syntax and morphology in paradigms*, 27–52. Oxford; New York, NY: British Academy / Oxford University Press.
- Clendon, Mark. 2014. *Worrorra: a language of the north-west Kimberley coast*. Adelaide: University of Adelaide Press.

- Copley, Bridget. 2005. Ordering and Reasoning. In Jon Gajewski, Valentine Hacquard, Bernard Nickel & Seth Yalcin (eds.), *New Work on Modality*, vol. 51. MIT, Cambridge, MA.: MITWPL.
- Copley, Bridget. 2007. When the actual world isn't inertial: Tohono O'odham "cem." In Michael Becker & Andrew McKenzie (eds.), *Proceedings of SULA 3, The Semantics of Under-Represented Languages in the Americas*, 1–18. Amherst, MA.: University of Massachusetts.
- Copley, Bridget & Heidi Harley. 2014. Eliminating causative entailments with the force-theoretic framework: The case of the Tohono O'odham frustrative cem. In Bridget Copley & Fabienne Martin (eds.), *Causation in Grammatical Structures*, 120–151. Oxford University Press.
- Coseriu, Eugenio. 1976. *Das romanische Verbalsystem*. Tübingen: TBL-Verlag Narr.
- Creissels, Denis, Gerrit J. Dimmendaal, Zygmunt Frajzyngier & Christa König. 2007. Africa as a morphosyntactic area. In Bernd Heine & Derek Nurse (eds.), *A Linguistic Geography of Africa* (Cambridge Approaches to Language Contact), 86–150. Cambridge: Cambridge University Press.
- Davis, Henry & Lisa Matthewson. 2016. Against all expectations: The meaning of St'át'imcets sénaʔ. In Marianne Huijsmans, Thomas J. Heins, Oksana Tkachman & Natalie Weber (eds.), *Papers for ICSNL 51- The Fifty-First International Conference on Salish and Neighbouring Languages* (UBCWPL 42), 37–67. UBCWPL and UBCOPL. University of British Columbia, Vancouver.
- Delancey Scott. 2012. Still mirative after all these years. *Linguistic Typology* 16(3). 529.
- Dowty, David. 1979. Word Meaning and Montague Grammar: the Semantics of Verbs and Times in Generative Semantics and Montague's PTQ. Dordrecht: Reidel.
- Eather, Bronwyn. 2011. *A grammar of Nakkara (Central Arnhem Land Coast)* (Outstanding Grammars from Australia 7). München: Lincom Europa.
- Erelt, Mati & Helle Metslang. 2009. Some notes on proximative and avertive in Estonian. *Linguistica Uralica*. Estonian Academy Publishers 45(3). 178–192.
- Evans, Nicholas. 1985. *Kayardild - The language of the Bentinck Islanders of North West Queensland*. Canberra: Australian National University PhD Thesis.
- Evans, Nicholas. 1995. *A Grammar of Kayardild. With Historical-Comparative Notes on Tangkic*. Berlin: Mouton de Gruyter.

- Evans, Nicholas. 2003. *Bininj Gun-wok: a pan-dialectal grammar of Mayali, Kunwinjku and Kune*. Australian National University, Canberra: Pacific Linguistics.
- Evans, Nicholas & Honoré Watanabe (eds.). 2016. *Insubordination*. Amsterdam: John Benjamins Publishing Company.
- Ferreira, Marcelo. 2014. Displaced Aspect in Counterfactuals: Towards a More Unified Theory of Imperfectivity. In Luka Crnić & Uli Sauerland (eds.), *The Art and Craft of Semantics Vol 1* (MIT Working Papers in Linguistics 70), 147–164. Cambridge, MA.: MITWPL.
- Filip, Hana. 2017. The Semantics of Perfectivity. *Italian journal of linguistics*. Torino Rosenberg & Sellier 29(1). 167–200.
- Foley, William A. 1991. *The Yimas Language of Papua New Guinea*. Stanford: Stanford University Press.
- Ford, Lysbeth & D. McCormack. 2007. *Murrinh tetemanthay ngarra murrinh law kardu bamam thanguna: Murrinhpatha - English Legal Glossary*. (online) <http://www.bowden-mccormack.com.au>: Bowden McCormack Lawyers + Advisors.
- García Salido, Gabriela. 2014. Clause linkage in southeastern Tepehuan, : a Uto-Aztecan language of Northern Mexico. Thesis.
- Goddard, Cliff. 1983. A semantically-oriented grammar of the Yankunytjatjara dialect of the Western Desert language. Canberra: Australian National University PhD Thesis.
- Goddard, Cliff. 1985. *A grammar of Yankunytjatjara*. Alice Springs, N.T.: Institute for Aboriginal Development.
- Green, Rebecca. 1995. *A Grammar of Gurr-goni (North Central Arnhem Land)*. Canberra: Australian National University PhD Thesis.
- Green, Rebecca. 2003. Proto Maningrida within Proto Arnhem: evidence from verbal inflectional suffixes. In Nicholas Evans (ed.), *The Non-Pama-Nyungan Languages of Northern Australia: Comparative studies of the continent's most linguistically complex region*, 369–421. Canberra: Pacific Linguistics.
- Guillaume, Gustave & Annette Vassant. 1992. *Leçons de linguistique de Gustave Guillaume 1938-1939: Leçons de l'année 1938-1939 Volume 12*. Lille: Presses Universitaires du Septentrion.
- Hacquard, Valentine. 2009. On the interaction of aspect and modal auxiliaries. *Linguistics and Philosophy* 32(3). 279–315.

- Haiman, John. 1980. *Hua. A Papuan language of Eastern Highlands of New Guinea* (Studies in Language Companion Series 5). Amsterdam: J. Benjamins.
- Haiman, John. 1988. Inconsequential clauses in Hua and the typology of clauses. In John Haiman & Sandra A. Thompson (eds.), *Clause Combining in Grammar and Discourse*, 49–70. Amsterdam ; Philadelphia: John Benjamins Publishing Company.
- Hale, Kenneth. 1969. Papago /čim/. *International Journal of American Linguistics*. University of Chicago Press 35(2). 203–212.
- Hale, Kenneth. 1976. The adjoined relative clause in Australia. In Robert Dixon (ed.), *Grammatical categories in Australian languages*, 78–105. Australian Institute of Aboriginal Studies Press. Canberra: Australian Institute of Aboriginal Studies.
- Hardy, Heather K. & Lynn Gordon. 1980. Types of Adverbial and Modal Constructions in Tolkapaya. *International Journal of American Linguistics*. University of Chicago Press 46(3). 183–196.
- Harvey, Mark. 2002. *A Grammar of Gaagudju*. 1er édition. Berlin ; New York: De Gruyter Mouton.
- Haspelmath, Martin. 2001. The European linguistic area: Standard Average European. In Martin Haspelmath, Ekkehard König, Wulf Oesterreicher & Wolfgang Dressler (eds.), *Language Typology and Language Universals / Sprachtypologie und sprachliche Universalien / La typologie des langues et les universaux linguistiques. Volume 2*, 1492–1510. Berlin: Walter de Gruyter.
- Heath, Jeffrey. 1984. *Functional Grammar of Nunggubuyu*. Canberra / Atlantic Highlands, N.J.: Humanities Press / Australian Institute of Aboriginal Studies.
- Heine, Bernd. 1994. On the Genesis of Aspect in African Languages: The Proximative. *Annual Meeting of the Berkeley Linguistics Society* 20(2). 35–46.
- Heine, Bernd. 2003. Grammaticalization. In Brian D. Joseph & Richard D. Janda (eds.), *The Handbook of Historical Linguistics*, 573–601. Oxford / Malden, MA.: Blackwell.
- Heine, Bernd & Tania Kuteva. 2002. *World Lexicon of Grammaticalization*. Cambridge: Cambridge University Press.
- Hercus, Louise. 1994. *A grammar of the Arabana-Wangkangurru language, Lake Eyre Basin, South Australia* (Pacific Linguistics Series C 128). Research School of Pacific and Asian Studies, The Australian National University: Pacific Linguistics.

- Hintz, Daniel J. 2011. *Crossing Aspectual Frontiers: Emergence, Evolution, and Interwoven Semantic Domains in South Conchucos Quechua Discourse*. Berkeley / Los Angeles: University of California Press.
- Hopper, Paul J. 1991. On some principles of grammaticization. In Elizabeth Closs Traugott & Berndt Heine (eds.), *Approaches to Grammaticalization: Volume I. Theoretical and Methodological Issues* (Typological Studies in Language), 17–36. Amsterdam / Philadelphia: John Benjamins.
- Ippolito, Michela. 2003. Presuppositions and Implicatures in Counterfactuals. *Natural Language Semantics* 11(2). 145–186.
- Ippolito, Michela. 2006. Semantic Composition and Presupposition Projection in Subjunctive Conditionals. *Linguistics and Philosophy* 29(6). 631–672.
- Kamp, Hans. 1979. Events, instants and temporal reference. In R. Bäuerle, U. Egli & A. v Stechow (eds.), *Semantics from Different Points of View* (Springer Series in Language and Communication), 376–417. Berlin / Heidelberg: Springer-Verlag.
- Kamp, Hans & Uwe Reyle. 1993. *From Discourse to Logic*. Dordrecht: Kluwer Academic Publishers.
- Kapitonov, Ivan. 2019. *A grammar of Kunbarlang*. Melbourne: The University of Melbourne.
- Kapitonov, Ivan & Caroline Gentens. 2018. Yimarne in Kunbarlang: from similitative to quotative. Presented at the 10th Syntax of the World's Languages conference (SWL 8), INALCO, Paris.
- Kehayov, Petar & Florian Siegl. 2006. The evidential past participle in Estonian reconsidered. *Études finno-ougriennes*. Paris: Klincksieck 38. 75–117.
- Klein, Wolfgang. 1994. *Time in Language*. London / New York: Routledge.
- Koenig, Jean-Pierre & Lian-Cheng Chief. 2008. Scalarity and state-changes in Mandarin (and other languages). In Olivier Bonami & Patricia Cabredo Hofherr (eds.), *Empirical Issues in Syntax and Semantics* 7, 241–262. CSSP. Paris. http://www.cssp.cnrs.fr/eiss7/index_en.html (24 July, 2015).
- Koenig, Jean-Pierre & Nuttannart Muansuwan. 2000. How to End Without Ever Finishing: Thai Semi-perfectivity. *Journal of Semantics* 17(2). 147–182.
- Korn, Agnes & Irina Nevskaya (eds.). 2017. *Prospective and Proximative in Turkic, Iranian and Beyond*. Wiesbaden: Reichert Verlag.
- Kozlov, Alexey. 2019. Iterative and avertive polysemy in Moksha Mordvin. *STUF - Language Typology and Universals* 72(1). 133–159.

- Kratzer, Angelika. 1991. Modality. In Arnim von Stechow & Dieter Wunderlich (eds.), *Semantics: An International Handbook of Contemporary Research*, 639–650. Berlin: De Gruyter.
- Kroeger, Paul. 2017. Frustration, culmination, and inertia in Kimaragang grammar. *Glossa*. Ubiquity Press 2(1:56). 1–29.
- Kuteva, Tania. 2000a. TAM-auxiliation and the avertive category in Northeast Europe. In M. M. Jocelyne Fernandez (ed.), *Grammaticalisation aréale et sémantique cognitive: les langues fenniques et sames = Areal grammaticalization and cognitive semantics : the Finnic and Sami languages*, 27—41. Louvain: Peeters.
- Kuteva, Tania. 2000b. Areal grammaticalization: The case of the Bantu-Nilotic borderland. *Folia Linguistica*. Walter de Gruyter, Berlin / New York 34(3–4). 267–284.
- Kuteva, Tania. 2001. *Auxiliation: An Enquiry into the Nature of Grammaticalization*. Oxford ; New York: Oxford University Press.
- Kuteva, Tania A. 1998. On Identifying an Evasive Gram: Action Narrowly Averted. *Studies in Language* 22(1). 113–160.
- Kuteva, Tania, Bas Aarts, Gergana Popova & Anvita Abbi. 2019. The grammar of ‘non-realization.’ *Studies in Language*. John Benjamins 43(4). 850–895.
- Landman, Fred. 1992. The Progressive. *Natural Language Semantics*. Springer 1(1). 1–32.
- Laughren, Mary. 1999. Constraints on the Pre-auxiliary Position in Warlpiri and the Nature of the Auxiliary. In *Proceedings of the 1999 Conference of the Australian Linguistic Society*. UWA, Perth: Australian Linguistic Society.
- Laughren, Mary. 2002. Syntactic Constraints in a “Free Word Order” Language. In Mengistu Amberber & Peter Collins (eds.), *Language Universals and Variation*, 83–130. Westport, Conn.: Praeger Publishers.
- Legate, Julie. 2009. Clausal Recursion and Embedding in Warlpiri. *LingBuzz*.
- Legate, Julie Anne. 2003. The Morphosemantics of Warlpiri Counterfactual Conditionals. *Linguistic Inquiry* 34(1). 155–162.
- Lichtenberk, Frantisek. 2008. *A Grammar of Toqabaqita*. Berlin: Walter de Gruyter.
- linden, An Van & Jean-Christophe Verstraete. 2008. The nature and origins of counterfactuality in simple clauses: Cross-linguistic evidence. *Journal of Pragmatics* 40(11). 1865–1895.
- Malchukov, Andrej L. 2004. Towards a Semantic Typology of Adversative and Contrast Marking. *Journal of Semantics* 21(2). 177–198.

- Mari, Alda & Fabienne Martin. 2009. Perfective and Imperfective in French - Kinds of abilities and Actuality Entailment (And some notes on epistemic readings). Institut Jean Nicod, Paris, ms.
- Martin, Fabienne & Hamida Demirdache. 2020. Partitive accomplishments across languages. *Linguistics* 58(5). 1195–1232.
- Martin, Fabienne & Florian Schäfer. 2012. The modality of ‘offer’ and other defeasible causative verbs. In Nathan Arnett & Ryan Bennett (eds.), *Proceedings of the 30th West Coast Conference on Formal Linguistics*, 248–258. Somerville, MA: Cascadilla Proceedings Project.
- Martin, Fabienne & Florian Schäfer. 2017. Sublexical modality in defeasible causative verbs. In Ana Arregui, María Luisa Rivero & Andrés Salanova (eds.), *Modality Across Syntactic Categories*, 87–108. Oxford: Oxford University Press.
- McConvell, Patrick & Mary Laughren. 2004. The Ngumpin-Yapa subgroup. In Claire Bowerman & Harold James Koch (eds.), *Australian Languages: Classification and the Comparative Method*, 151–177. Amsterdam: John Benjamins Publishing.
- McGregor, William. 1990. *A Functional Grammar of Gooniyandi*. Amsterdam: John Benjamins.
- McKay, Graham Richard. 1975. *Rembarnga : a language of central Arnhem Land*. Canberra: Australian National University Ph.D. Thesis.
- Meakins, Felicity & Rachel Nordlinger. 2014. *A Grammar of Bilinarra: An Australian Aboriginal Language of the Northern Territory*. Berlin: Walter de Gruyter.
- Müller, Neele. 2013. *Tense, Aspect, Modality, and Evidentiality Marking in South American Indigenous Languages*. Nijmegen: Radboud Universiteit. PhD Thesis.
- Nash, David George. 1980. *Topics in Warlpiri grammar*. Massachusetts Institute of Technology PhD Thesis.
- Nordlinger, Rachel. 1998. *A grammar of Wambaya, Northern Territory (Australia)*. Canberra: Pacific Linguistics.
- Nordlinger, Rachel & Patrick Caudal. 2012. The Tense, Aspect and Modality system in Murrinh-Patha. *Australian Journal of Linguistics* 32(1). 73–113.
- O’Hagan, Zachary. 2018. Lexical Semantics and Caquinte Frustrative Constructions. Presented at the 2018 Annual Meeting of the Society for the Study of the Indigenous Languages of the Americas (SSILA 2018).
- Olmen, Daniël Van. 2018. Reproachatives and imperatives. *Linguistics* 56(1). 115–162.

- Overall, Simon E. 2017. A Typology of Frustrative Marking in Amazonian Languages. In Alexandra Y. Aikhenvald & R. M. W. Dixon (eds.), *The Cambridge Handbook of Linguistic Typology*, 477–512. Cambridge: Cambridge University Press.
- Pahonțu, Beatrice. forthcoming. *Périphrases progressives/proximatives et avertivité en roumain*. PhD Thesis, Université de Paris / Universitatea din București.
- Paul, Ileana, Baholisoa Simone Ralalaoherivony & Henriëtte de Swart. 2020. Culminating and non-culminating accomplishments in Malagasy. *Linguistics*. De Gruyter Mouton 58(5). 1285–1322.
- Phillipps, Joshua. to appear. Negation in Australian languages. In Claire Bower (ed.), *Handbook of Australian languages*. Oxford: Oxford University Press.
- Pinson, Mathilde. 2020. It looks like this complementizer used to be an adjective. *Lexis. Journal in English Lexicology*. Université Jean Moulin Lyon 3 15. 1–19.
- Plungian, Vladimir. 2001. Antirezul'tativ: do i posle rezul'tata [Anti-resultative: before and after result. In Vladimir Plungian (ed.), *Issledovanija po teorii grammatiki. I: Glagol'nye kategorii.*, 50–88. Moscow: Russkie slovari.
- Plungian, Vladimir. 2005. Irrealis and modality in Russian and in typological perspective. In Björn Hansen & Petr Karlík (eds.), *Modality in Slavonic languages: new perspectives*, 135–146. München: Verlag Otto Sagner.
- Portner, Paul. 2018. Commitment to Priorities. In Daniel Fogal, Daniel W. Harris & Matt Moss (eds.), *New Work on Speech Acts*, 296–316. Oxford: Oxford University Press.
- Potts, Christopher. 2005. *The Logic of Conventional Implicatures* (Oxford Studies in Theoretical Linguistics No. 7). Oxford / New York: Oxford University Press.
- Potts, Christopher. 2007. The expressive dimension. *Theoretical Linguistics* 33(2). 165–198.
- Pym, Noreen & Bonnie Larrimore. 1979. *Papers on Iwaidja Phonology and Grammar* (Work Papers SIL-AAB, Series A). Darwin: Summer Institute of Linguistics.
- Reichard, Joshua. 2009. Life and Death Overtime: Sacred Play of the Ancient Mesoamerican Rubber Ball Game. In *Proceedings of the American Academy of Religion Midwest Region 2009*. Atlanta, GA.: American Academy of Religion.
- Reichenbach, Hans. 1947. *Elements of Symbolic Logic*. Basingstoke: MacMillan.
- Russell, Bertrand. 1936. On Order in Time. *Journal of Symbolic Logic*. Association for Symbolic Logic 1(2). 72–73.
- Sansò, Andrea. 2020. Routes towards the Irrealis. *Transactions of the Philological Society* 118(3). 401–446.

- Schultze-Berndt, Eva. 2000. Simple and Complex Verbs in Jaminjung - A study of event categorisation in an Australian language. Universiteit Nijmegen Phd Thesis.
- Schultze-Berndt, Eva & Patrick Caudal. 2016. On the reality of hypothetical possibilities: evidence from Jaminjung / Ngaliwurru. Conference talk, SPINFEST 2016, York.
- Sharp, Janet Catherine. 2004. *Nyangumarta - A language of the Pilbara region of Western Australia*. Canberra: Pacific Linguistics, Research School of Pacific and Asian Studies, The National Australian University.
- Simpson, J. 2012. Warlpiri Morpho-Syntax: A Lexicalist Approach. Dordrecht: Springer.
- Singer, Ruth, Nita Garidjalalug, Heather Hewett, Peggy Mirwuma & Phillip Ambidjambidj. 2015. *Mawng dictionary v1.0*. Waruwi: Mawng Ngaralk.
- Smith, Carlota. 1991. *The Parameter of Aspect*. Dordrecht: Kluwer.
- Smith-Dennis, Ellen. 2021. Don't feel obligated, lest it be undesirable: the relationship between prohibitives and apprehensives in Papapana and beyond. *Linguistic Typology*. De Gruyter.
- Stokes, Bronwyn. 1982. *A Description of Nyikina. A language of the West Kimberley, Western Australia*. Canberra: Australian National University Ph.D. Thesis.
- Street, Chester S. & Lyn Street. 1989. Murrinh-Patha vocabulary (electronic version). Wadeye, N.T., ms.
- Tatevosov, Sergei. 2008. Subeventual structure and non-culmination. In Olivier Bonami & Patricia Cabredo Hofherr (eds.), *Empirical Issues in Syntax and Semantics 7*, 393–422. Paris: Université Paris-Sorbonne. <http://www.cssp.cnrs.fr/eiss7/>.
- Tatevosov, Sergei. 2020. On the temporal structure of nonculminating accomplishments. *Linguistics*. De Gruyter Mouton 58(5). 1323–1371.
- Tatevosov, Sergei & Mikhail Ivanov. 2009. Event structure of non-culminating accomplishments. In Lotte Hogeweg, Helen deHoop & Andrej Malchukov (eds.), *Cross-linguistic Semantics of Tense, Aspect, and Modality* (Linguistik Aktuell/Linguistics Today), vol. 148, 83–130. Amsterdam / Philadelphia: John Benjamins.
- Tsunoda, Tasaku. 1981. *The Djaru language of Kimberley, Western Australia* (Pacific Linguistics. Series B 78). Canberra: Pacific Linguistics.
- Vafaeian, Ghazaleh. 2018. Progressives in use and contact : A descriptive, areal and typological study with special focus on selected Iranian languages. Stockholm University.

- Van Linden, An & Jean-Christophe Verstraete. 2008. The nature and origins of counterfactuality in simple clauses: Cross-linguistic evidence. *Journal of Pragmatics* 40(11). 1865–1895.
- Verstraete, Jean-Christophe. 2005. The semantics and pragmatics of composite mood marking: The non-Pama-Nyungan languages of northern Australia. *Linguistic Typology* 9(2). 223–268.
- Verstraete, Jean-Christophe. 2006. The Nature of Irreality in the Past Domain: Evidence from Past Intentional Constructions in Australian Languages. *Australian Journal of Linguistics* 26(1). 59–79.
- Voegelin, C. F. & F. M. Voegelin. 1969. Hopi /ʔas/. *International Journal of American Linguistics*. University of Chicago Press 35(2). 192–202.
- Vuillermet, Marine. 2012. A Grammar of Ese Ejja, a Bolivian language of the Amazon — Grammaire de l'ese ejja, langue tacana d'Amazonie bolivienne. Université Lyon 2.
- Vuillermet, Marine. 2018. Grammatical fear morphemes in Ese Ejja - Making the case for a morphosemantic apprehensional domain. In Maïa Ponsonnet (ed.), *Morphology and emotions across the world's languages*, 256–293. Amsterdam: John Benjamins.
- Westerlund, Torbjörn. 2015. *A grammatical sketch of Ngarla (Ngayarta, Pama-Nyungan)* (Asia-Pacific Linguistics ; A-PL 16.). Anu, A.C.T: Asia-Pacific Linguistics.
- Whitehead, Alfred North. 1929. *Process and Reality*. New York: Free Press.
- Whiteley, Wilfred Howell. 1960. *The Tense System of Gusii*. Kampala: East African Institute of Social Research.
- Wiener, Norbert. 1914. A contribution to the theory of relative position. *Proceedings of the Cambridge Philosophical Society* 27. 293–304.
- Wilkins, David. 1989. *Mparntwe Arrernte (Arand): studies in the structure and semantics of grammar*. Canberra: Australian National University Ph.D. Thesis.
- Ziegeler, Debra. 2000. What almost can reveal about counterfactual inferences. *Journal of Pragmatics* 32(12). 1743–1776.
- Ziegeler, Debra. 2015. Calamities and Counterfactuals: A Historical View of Polarity Reversal. *Anglophonia. French Journal of English Linguistics* 19.