# 9.
# Culmination/telicity and event delineation in Australian Languages: phonology, morphosyntax, semantics and pragmatics[1]

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## 1. Introduction

The present paper will explore several issues which, I think, have been close to Léa's theoretical heart throughout her entire career, that is the complex interplay between argument structure, event structure, actionality, tense and aspect parameters in the verb's morphosyntax to semantics interface. Her numerous publications on transitivity, voice/ergativity, together with their correlates with respect to tense-aspect and actionality, are a clear indication of a distinctly acquired taste for these particular theoretical notions—a taste Léa had evidently developed as early as her PhD thesis (Nash 1995), and has not stopped cultivating since then, cf. e.g. Nash (2017).

1. This paper is dedicated to Léa Nash on her 60th birthday, in appreciation for her support and wisdom over the years, and for her outstanding contribution to our field as a theoretical and formal linguist. A linguist whose work I have always found inspiring and intellectually stimulating; and a colleague whose ever cheerful, kind and generous attitude made a joy to meet and interact with in various academic circumstances throughout my career.

The central issue I wish to investigate here[2, 3], is that of the locus of encoding of telicity, and in general event delimitation/quantification, in Australian languages; I will try and show that these languages (which I take to constitute a linguistic phylum derived from Proto-Australian, cf. Harvey & Mailhammer 2017), tend to offer a typological picture

2. **List of abbreviations and symbols used**: A: transitive subject, agent argument; ABL: ablative; ACC: accusative; ANT: anterior tense (aspectually underspecified: perfect, perfective, past imperfective); APP: applicative; ATTEN: attenuative; AUG: augmented number; CAUS: 'causative' conjugation exponent or 'causative' auxiliary; CNJ: conjunctive; CONJ: conjunction; CTYP: clause-type clitic (essentially declarative); DEM: demonstrative; DET: determiner; DIST: distal; DU: dual; ERG: ergative; FOC: focus clitic; FRUST: frustrative particle; FUT: future/irrealis present inflection; IMP: imperative; IMPF: (past) imperfective; IMPL: implicated noun phrase; INCH: 'inchoative' conjugation exponent or 'inchoative auxiliary'; INT: interrogative pronoun; IRR: irrealis exponent; LOC: locative; M: masculine; MIGHT: 'predictable and unwanted consequence' inflection; MIN: minimal number; NEG: negation particle; NFUT: non-future tense; NM: nominalizer; NOM: nominative; NOW: presuppositional temporal particle/clitic ('now, then'); O: object; OBL: oblique; PART: particle; PC: past completive tense; PCF: past counterfactual (= past irrealis) inflection; PERF: perfective and present perfect underspecified tense; PL: plural; PP: past punctual tense; PRES: present; PS: simple past (past perfective) tense; PST: past tense; REAL: realis exponent; RECIP: reciprocal; RED: reduplication; REL: relative tense; S: subject; SG: singular; TR(LC): limited control transitiver; USP: aspectually underspecified past tense; WANT: frustrative-volitional particle; YK: 'YouKnow' clitic particle; Ø: 'zero' inflectional exponent.

3. I here gratefully acknowledge the financial support of the Labex *Empirical Foundations of Linguistics* (ANR "Investissements d'Avenir" programme, ANR-10-LABX-0083); this paper has especially benefited from interactions with members of the GD4, GL3 (Strand 3) and MEQTAME (Stand 2) operations. The Labex EFL has also funded fieldwork I conducted in Australia between 2013 and 2020, which has directly contributed to my understanding of TAM categories in Australian languages. This paper has also indirectly benefited from two other scientific projects I am currently coordinating, namely the IRP CNRS *FEMIDAL* ('Formal/Experimental Methods and In-depth Description of Australian Indigenous Languages'), and the Idex University of Paris *CELINAC* project ('Co-Etude d'une Langue INdigène Australienne en contexte Culturel') (Action #19 'Science et Société'). Finally, I would also like to thank an anonymous reviewer for her comments (which helped make this paper more precise in its study of differences between Australian languages, and 'Standard Average European' languages in particular), and of course, the editors of this Festschrift for inviting me to contribute to a volume celebrating the achievements and career of such a wonderful, ever supportive colleague as Léa Nash.

differing from that usually found in several other linguistic areas of the world, especially Indo-European languages *qua* 'Standard Average European' (SAE) languages (Haspelmath 1998)—i.e., well-described European languages, regardless of langue families. And one that often requires the intervention of a comparatively higher amount of discourse-level processes to establish basic Vendlerian aspectual parameters, and in particular, telicity, than is generally assumed in theories of aspect construal based on SAE languages. I will take this to reflect on a pervasive aspectual underspecification (or possibly, functional deficiency, as we will see) in the verbal lexicon and morphology and relation to the notion of change-of-state across both lexicon and grammar—one, again, that is distinctly more marked than is generally the case in SAE.

Australian languages are known to frequently exhibit productive so-called intransitive 'inchoative' and transitive 'causative' patterns in their morphology, i.e., so-called 'conjugation classes' (Dixon 2002).[4] Caudal, Dench & Roussarie (2012) showed that they have a strong actional-aspectual basis in at least some Pama-Nyungan languages where these morpho-syntactic patterns are necessary to (productively) form verbal stems (most verbs, and all open-class verbs, being derived from either state-denoting or object-denoting nominal/adjectival roots—verbal roots are *de facto* very rare in such languages, let alone telic verbal roots). Indeed, in those Pama-Nyungan languages, non-causative inchoative morphology primarily describes either transitory stage-level states (never lexically-construed individual-level states), or non-subject controlled achievements, including so-called degree achievements/unbounded changes-of-state (with the distinction between states and non-states being sometimes a purely contextual, subtle matter), while

4. It should be noted that productivity does not preclude the existence of more or less abundant frozen, conventionalized derivations, cf. e.g. Caudal, Dench & Roussarie (2012:134) for some instances of arbitrary, lexified derivations with both CAUS and INCH affixes; and some other derivational affixes coexisting with INCH and CAUS are distinctly non-productive in Australian languages. I should also make clear that contrary to what an anonymous reviewer seems to imply, productivity is not a categorical and therefore reliable parameter to distinguish between derivational vs. inflectional morphological processes, with the latter being regarded as 'syntactic' due to their productivity. As is well-known in modern theoretical morphology, there is often no clear-cut distinction between inflectional and derivational processes; conjugation classes in Australian languages are a good illustration of this problem, and are at once derivational and inflectional morphological patterns. I will get back to this below in another note.

causative-marked stems can denote all aspectual types of dynamic verbs except states, and always have an event-controlling subject—but do not encode telicity *per se*; they only do so in certain derived patterns, as we will see. This means that the *stative/dynamic* distinction is far more important to their aspectual lexicon than telicity; and this also means that telicity and event control are not encoded in their lexical (nominal) roots, but in some derived verbal stems (a limited number of non-derived verb exist in such languages). I will show that while non-Pama-Nyungan languages do not appear to systematize similar restrictions in their verbal lexicon (some possess inchoative/causative morphology, but most are endowed with a large non-derived verbal lexicon), they nevertheless possess semantically similar paradigms.

Alongside with a stronger than usual tendency to not encode telicity-related parameters in lexical heads but at some higher level of the morphosyntactic derivation,[5] both Pama-Nyungan and non-Pama-Nyungan languages appear to possess a rich grammar of non-culmination, without resorting to imperfective morphology to achieve such effects. Indeed, these languages are in fact rife with so-called 'non-culminating accomplishment' patterns, as well as so-called 'avertive/frustrative' morphology or constructions—all of which point to a failure to culminate (or at least some defect in the associated result states, as I will show). This is grammatically, morphosyntactically evidenced by the abundance of dedicated particles or clitics used to convey that an event failed to reach its endpoint, was prematurely interrupted, and/or did not produce the expected results, even in combination with a perfective tense inflection. This can also be encoded by dedicated inflections, i.e. so-called frustrative/avertive morphology, whether synthetic or periphrastic (Kuteva 1998; Kuteva 2001). Similar 'failed ending/premature ending,' 'in vain' particles or clitics are found with seemingly all aspectual lexical types of sentences in at least some Australian languages, i.e., regardless of whether or not they seem to lexically denote states, activities (some sort of subject-controlled teleological content is then introduced by means of coercion, such as e.g. 'wait in vain/stand somewhere in order to achieve something but in vain'), or semelfactives/achievements/degree achievements/accomplishments. The main point of the present paper is to establish that Australian languages provide a very flexible lexical and inflectional aspectual system, so that morphosyntactic derivations up to a single-

5. Such a fact is of paramount importance if one assumes telicity to be part of a hierarchy of functional heads à la Travis (2010), for instance.

verb type of structure (VP or clause, the difference is sometimes difficult to establish in languages with polysynthetic morphology) often remain radically unspecified, and that these languages tend to resort to syntactically richer complex event descriptions (e.g., *qua* constructions involving multiple predicate elements, or serial verbs, and multi-verb constructions in general; see also the abundance of complex event structure-related discourse clitics, particles and connectives in such languages, cf. e.g. Ritz, Dench & Caudal 2012; Ritz & Schultze-Berndt 2015, etc.) sometimes clearly at an inter-sentential syntactic level (typically reflecting on frozen rhetorical strategies as biclausal constructions, for instance) to compensate for such structural deficiencies. This sets them apart from many well-studied European languages, who typically resort on a single verb description to achieve a full event structure construal, and involve aspectual rich and specific lexica—and lack inflectional avertive/frustratives, as well as 'weak perfective' tenses, and exhibit more limited and rarer 'non-culminating' patterns in general (this excludes *bona fide* imperfectivity).

My study of telicity and event-delineation in Australian languages will proceed as follows: in section §2, I will review converging facts in a number of especially Pama-Nyungan languages with respect to the lexical encoding (or rather, lack thereof) of culmination/telicity, stressing their very flexible nature in this respect. Starting from the detailed analysis of Panyjima derived verbs in Caudal, Dench & Roussarie (2012), I will show that many Pama-Nyungan languages possess a high degree of aspectual underspecification of their verbal lexicon (which I will treat as some sort of aspectual deficiency)—a characteristics they share with a number of other languages across the world. I will move in section §3 to the study of 'failure to culminate' patterns. This covers (§3.1) not only 'non-culminating accomplishments' (Bar-el 2005; Bar-el, Davis & Matthewson 2006), or more generally what I will dub 'partitive culminations' (Martin & Demirdache 2020), or PCs, but also (§3.2) so-called avertive/frustrative morphology in the sense of e.g. Kuteva (1998), Kuteva et al. (2019), Overall (2017), etc. I will suggest that PCs and avertives are both formally and semantically convergent structures in Australian languages, essentially because they derive from conventionalized rhetorical devices beyond the clausal domain—essentially as a side effect of the more than averagely aspectually deficient lexicon and aspectual morphosyntax in Australian languages, which offer not only a large number of aspectually deficient verbs, but also tenses.

## 2. Construing verbal culmination in Australian languages: an aspectually and causally very flexible verbal lexicon

Numerous seminal references in the formal treatment of telicity inspired by Krifka (1992), Krifka (1998) were grounded on a Parsons (1990)'s style theta-role based decompositional analysis of telicity. Although critical of Parson's *Cul* operator as it could not account for a variety of intriguing semantic phenomena, especially analogies between nominal and verbal reference in terms of so-called homogeneity (a view popularized in Dowty 1979) these typically elaborated semantically more refined thematic roles, coupled with an abstract, second-order typing of verbal predicates following Krifka's theory (cf. his QUA and CUM second order predicates, operating over the denotation of verbs).[6] This analytical strategy then combined in a subsequent generation of novel seminal works also inspired by what can be called 'event templates' (from Dowty 1979 to Levin & Rappaport Hovav 1999), and gave rise to a large number of theoretical developments more explicitly treating telicity at the articulation between the lexicon and syntax, see e.g. Borer (2005), Ramchand (2008), Travis (2010), Beavers & Koontz-Garboden (2012), Beavers & Koontz-Garboden (2020)—the latter references incorporating the numerous insights coming from scalar theories of event structure à la e.g. Kennedy & McNally (2005), Caudal & Nicolas (2005), Kennedy (2012) into the fold of a general theory of aspect construal at the morphosyntax to semantics interface. These more recent theories have provided a more articulate model of how lexical aspectual and actional information can project into a full event structure interpretation, through multiple morphosyntactic layers, including in languages possessing complex morpholexical strata (cf. e.g. Ramchand 1997, Tatevosov 2002, Ramchand 2005, Tatevosov 2012 among many references). The analytical route I will follow here is somewhat different, in that it eschews resorting to a syntax-oriented type of approach, especially one penetrated by a widely defined minimalist theoretical apparatus; my analysis will be essentially conducted at the morphology to semantics interface, and will be crucially inspired by Caudal, Dench & Roussarie (2012)'s account of verbal derivation in Panyjima, an Australian Aboriginal language spoken in the Pilbara region (Western Australia)—for want of space I will not develop it

6. Those are particularly central to Krifka's theory of homomorphisms connecting verbal and nominal denotations, and accounting for the quantificational impact of so-called incremental theme arguments ~~Dowty (1991)~~ over event structure.

formally here, and leave it to the reader to imagine how it should be formulated in her or his favorite framework.[7]

### 2.1 On so-called inchoative/causative verbs in Panyjima

As was noted in Dixon (2002:195), a very large proportion of Australian languages seem to be endowed with derivational-inflectional patterns (so-called 'conjugation class markers,' which are unanalyzable, fused units), involving a conversion from a nominal/adjectival[8] root to a verbal stem, and then typically possess a limited number of non-derived inflected verbs, especially monomorphemic roots. Dixon (2002:434-436) furthermore observes that "virtually every Australian language" typically possesses at least two semantically and morphologically contrasting conjugation classes:[9] 'inchoative' (INCH) conjugations, associated with intransitive verbs, and 'causative' (CAUS) conjugations, associated with transitive verb. It has been often claimed (following Dixon's work, and many grammatical descriptions) that the mixed inflectional-derivational affixes corresponding to these two conjugation types essentially served the purpose of creating inchoative/causative verbal alternates (Nedjalkov & Silnitsky 1973, Haspelmath 1993): according to this view INCH verbs describe non-causative

7. Given the time and space to develop a novel formal analysis, I would have combined Caudal, Dench & Roussarie (2012)'s dependent-type coercion-based analysis with a formal lexicalized syntax à la HPSG to model morpholexical classes at the syntax/semantics interface. I would have specifically treated their various semantic types of 'bridging functions' as conventionalized uses of the INCH and CAUS exponents in the verbal lexicon, and ascribed them to lexical-syntactic classes; lexified derived verbs would have been treated as lexical leaves.

8. Nominal and adjectival roots cannot be distinguished on syntactic principles in many Australian languages, and even semantically, the distinction is often difficult to appreciate, including sometimes for seemingly object-denoting roots. I will use the label 'nominal/adjectival' or 'NAdj' to express this well-known areal generalization.

9. An easy point of comparison is so-called conjugation groups in French morphology, as exemplified by the *-i*(*ss*)- 2nd group exponent in French, cf. e.g. Garet (2021). But a stark difference between the two phenomena can be found in the complete absence of stative verbs among historically de-adjectival verbs in the 2nd group, as was shown in Caudal (2016), and the near complete absence of stative 2nd group verbs. This points to a broader phenomenon, namely an essentially different place occupied by stativity in the grammar of verb derivation of e.g., French (and in fact many other European languages) vs. in many Pama-Nyungan Australian languages, as I will demonstrate in this section.

changes-of-state, and CAUS verbs describe causative changes-of-state—cf. Dixon (2002:207-208). The empirical generalization has then been picked up in the general theoretical community, cf. e;g. Hale & Keyser (1998), Hale & Keyser (1999) and Koontz-Garboden (2007:117) about the Warlpiri verbalizers INCH/CAUS.

However the labels themselves were shown in Caudal, Dench & Roussarie (2012) to be misleading in the context of the Panyjima verbal system, and Dixon's empirical generalization not to apply to that language, nor in fact to a substantial number of Pama-Nyungan languages. The Panyjima paradigm in (1)-(4) comprises a series of non-verbal, non-inflected roots (a), and the associated INCH (b) and CAUS (c) derived verb stems (here given as uninflected units for the sake of simplicity, but these actually involve a diachronically distinct, but synchronically fused inflectional exponent; note that the surface spell-out of INCH vs. CAUS depends on the form of the root and its interaction with morphophonological rules, especially for INCH, but these details should not concern us here).[10] What matters is that INCH/CAUS Panyjima morphology does form systematic aspectual-actional

10. These synchronically fused derivational/inflectional elements, though they once probably involved two separate exponents, now serve two simultaneous purposes: (a) deriving verbs out non-verbal roots, and (b) marking inflectional information—one cannot assume an underlying productive compositional 'syntactic' process, as the form of said inflectional exponents varies lexically; their combination with the (still somewhat regular) former derivational exponents form *unanalyzable* morphological units, contrary to what the crude notation here used seems to suggest. Coming back to note 2, this also illustrates how arbitrariness can permeate syntactic processes, and it certainly affects inflectional paradigms—see e.g., deponent verbs in Latin, and in generally defectivity in inflectional paradigms, or the abundant existence of lexified uses of certain inflected verb forms (Panyjima itself possessing numerous forms of that type, cf. Dench 1991, or arbitrariness in so-called 'conjugation groups' in Romance (including those of the French second group). In other words, and again contrary to a suggestion made by the same reviewer and already discussed in a previous note, there is, in fact, nothing categorically 'syntactic' about INCH/CAUS paradigms in this regard, and the morphological nature of these processes cannot be questioned on such grounds—nor can one assume an underlying compositional syntactic process; and there probably was not even such a productive syntactic process at play back when they were still distinct, notably because the -Ø class results from the fusion of several formerly distinct classes; this ~~results in~~ seemingly arbitrary variation in the form of INCH paradigms—see Dench (1996) for details. But this does not mean that the logical form of their denotation cannot involve a separate inflectional component, as suggested in Caudal, Dench & Roussarie (2012),

alternations, but not mere inchoative/causative alternations, *pace* Dixon's generalizations.[11]

| | | | | |
|---|---|---|---|---|
| (1) | (a) | winya | 'full' | |
| | (b) | winya-yi-∅ | [full-INCH] | 'be full, get/become full' |
| | (c) | winya-ma-L | [full-CAUS] | 'fill' |
| (2) | (a) | muthumuthu | 'cool' | |
| | (b) | muthumuthu-wi-∅ | [cool-INCH] | 'be/become cool, cool (down)' |
| | (c) | muthumuthu-ma-L | [cool-CAUS] | 'cool (something) down' |
| (3) | (a) | karrara | 'sick' | |
| | (b) | karrara-yi-∅ | [sick-INCH] | 'be sick, become sick' |
| | (c) | karrara-ma-L | [sick-CAUS] | 'cause to be sick' |
| (4) | (a) | kutu | 'dead'[11] | |
| | (b) | kutu-wayi-∅ | [dead-INCH] | 'die' |
| | (c) | kutu-ma-L | [dead-CAUS] | 'kill' |

Given these datapoints, it seems that Panyjima INCH stems derived from a root denoting stage-level, non-permanent property *P* (e.g. *winya* 'full' in (1)) can receive not just a proper inchoative reading (e.g. *become*$_P$) as argued by Dixon and others, but also a plain stative reading *be*$_P$. This demonstrates that alas, the label INCH is most unfortunate. In the name of comparative concerns, I will nevertheless

although said content would need to be incorporated in the denotation of each fused inflectional morph.

11. I must disagree with an anonymous reviewer here, who suggested that the *kutu* 'dead' root could contribute a stage-level predicate. Indeed, bare root *kutu* refers to a generic, permanent, everlasting property of previously living referents, and it does not have change-of-state content. To clarify this issue, we need to introduce a theory of so-called 'manifestations' of individuals à la Heusinger & Wespel (2007), as an additional layer of individual-level type of meaning. Indeed, changes from one manifestation to another are possible, and some modal inflections with a generic/habitual meaning can capture such changes—see e.g. the so-called Nyamal past usitative, which can either describe past manifestations such as 'X used to be an initiated adult,' or changes-of-manifestation such as 'X became initiated' (Roussarie & Caudal 2009)—but not stage-level changes, nor stage-level states. What matters here is that 'dead' as a nominal root can refer to a (stative) manifestation, but never to a change-of-manifestation (change-of-state); and 'dead-INCH' can only refer to a change-of-manifestation. For the sake of simplicity though, I am lumping 'manifestations' with 'individuals' in this paper, and 'change-of-manifestation' with 'changes-of-states,' as those differences do not matter for the matter at stake. Note that all roots with a *bona fide* individual-level property as e.g. in the case of purely nominal roots, will behave like root *kutu.*.

keep using it, as a meta-theoretical terms orthogonal to the theoretical notion of inchoativity.

I should also mention that Caudal, Dench & Roussarie (2012) observe that all stative uses of inchoative stems they found in Dench's Panyjima corpus involved stage-level property denoting roots; *vice versa* individual-level denoting roots such as (4), can only receive a change-of-state reading in their INCH forms (e.g., *become*$_P$). Hence they concluded that INCH-states are semantically restricted to stage-level predicates, cf. Caudal, Dench & Roussarie (2012). Finally, a second problematic fact for characterizing INCH verbs as semantically inchoative à la Dixon (2002), is found in (5).

(5) *Panyjima* (Caudal, Dench & Roussarie 2012:131)

| | | | |
|---|---|---|---|
| ngunha-jirri | nyarru-wayi-ku | kunturrpa-ku | warama-lku |
| that-PL | dance-INCH-PRES | dust-ACC | make-PRES |

'They are dancing, making dust.'

Interestingly, the corresponding bases appear to refer to *types* of motion events (dancing and running here), i.e. they are abstract property types; Caudal, Dench & Roussarie (2012) argued that such utterances actually denotes *states of being engaged in an activity*, rather than straightforward activities.[12] But regardless of their precise semantics, they obviously do not denote change-of-state predicates, and therefore contradict Dixon's generalization.

When combined with various tenses, it becomes obvious that INCH stems denote complex semantic entities, straddling the boundary between states and (bounded or unbounded) changes-of-states, very much like Korean 'inchoative states' (Choi 2018). When used in the present, they seem to denote at once a presently ongoing change-of-state (e.g. a degree-achievement-like verb in the progressive), and the state resulting from such a change of state—in which case they can receive a present-perfect reading as well, which makes them three-way ambiguous, cf. (6)-(9).[13]

12. Thus INCH root *nyarru-wayi-* really means 'to be engaged in a dance' (with *nyarru* denoting a type of dance). Cf. English *be in flight*.

13. Note that *pace* what an anonymous reviewer suggested, INCH verbs radically differ from so-called second group verbs in French, or e.g. ADJ-*en* de-adjectival verbs in English, as the latter do not systematically alternate between a stative and change-of-state reading (they only possess the latter). This property, though not typologically very common, can be encountered in other language phyla (e.g., in Afroasiatic languages, Meyer & Wolff 2019). It is definitely a salient areal-typological property of deadjectival verbs in Australian languages (where the stative reading is often just as

(6) *Panyjima* (Caudal, Dench & Roussarie 2012:123)
ngunha-jirri jilyantharri thartipala-yi-ku
that-PL children dirty-INCH-PRES
ngunha jilya nharnu-ngarni karnu-ngka-ngarni
that child earth-HAVE skin-LOC-HAVE
'Those children are (getting) dirty. That child has earth on his skin.'

(7) *Panyjima* (Caudal, Dench & Roussarie 2012:124)
ngatha purralpi-lku wiya-lku mirlimirli-ku warru-wayi-jangu-la-rru
1SG.NOM unable-PRES see-PRES paper-ACC dark-INCH-REL-LOC-NOW ✓
mirta-rru ngatha wiya-lkaji warru-wayi-ku panu
not-NOW ✓ 1SG.NOM see-REAL dark-INCH-PRES very
'I can't see that paper, it's dark + it is becoming dark now.'

(8) *Panyjima* (Caudal, Dench & Roussarie 2012:123)
kutiya-la yurlu-ngka wiyurrpa manartu-wi-rta
other-LOC camp-LOC feelings good-INCH-FUT
'In the other camp, feelings are better/are good.'

(9) *Panyjima* (Caudal, Dench & Roussarie 2012:124)
ngatha panti-ku thurni-ku,
1SG.NOM sit-ACC laugh-ACC
ngatha ngayinypa-rru ✓ kuta-yi-ku
1SG.NOM breath-NOW short-INCH-PRES
'I'm laughing, I'm out of breath/I've become out of breath now, my breath is/has become short.'

It should also be noted that stage-level INCH-derived stems can be semantically very close to the combination of their underived root with the presuppositional/implicative change-of-state clitic *=rru* 'now, then' (Ritz, Dench & Caudal 2012) cf. (10), where *manartu-rru* effectively means something like 'to be good as a result of a (recent) change of state.'

(10) *Panyjima* (Caudal, Dench & Roussarie 2012:123)
wiyurrpa=rla ngatha manartu=rru ngarna-lha kajanmarra-ku
feelings=FOC 1SG.NOM good=NOW eat-PERF medecine-ACC
'I'm feeling good now (that) I've taken this medicine'

When used with the so-called past morpheme (which, in effect, has perfect uses as well), INCH-derived stems seem to retain their stative (resultative)/perfect ambiguity, cf. (11)-(12).

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prominent as the change-of-state reading), and a property so well-known as such it figures in good place in areal typological works such as Dixon (2002). See (Caudal, Dench & Roussarie 2012) for a more detailed discussion. The semantics of INCH verbs does not have any equivalent in the inflectional morphology of French, nor (to the best of my knowledge) in any other Romance or Germanic language. And one cannot construe *kutu*-like roots vs. *karrara*-like roots as 'culminating' vs. 'non-culminating' roots as this reviewer suggested, since all non-inflected roots are routinely used to construe stative utterances. Such a view is both empirically ungrounded and theoretically incorrect.

(11) *Panyjima* (Caudal, Dench & Roussarie 2012:123)
ngunha-mpa=rla marlpa kunyanyngu=rru
that-YK=FOC man sleepy-NOW
kuwarri=rla manartu-wi-nha=rru
now=FOC good-INCH-PAST=NOW
'That one, you know, that sleepy man now. Well now he's (become) better'

(12) *Panyjima* (Dench 1991:46)
marlpa palangu karri-lha tharni-yayi-nha=rru?
man there stand-PERF where-INCH-PAST=NOW
'What's become of the man who was standing there near you?'

This joint stative (resultative)-perfect reading is clearly reminiscent of so-called iamitives (Olsson 2013)—i.e. forms alternating between a perfect-like, result state reading, and a change-of-state reading. Indeed, it overlaps with the change-of-state/stative ambiguity exhibited by 'now, then' clitics and particles so prevalent among Australian languages (Ritz, Dench & Caudal 2012; Ritz & Schultze-Berndt 2015). This, I believe, is an important indication of the central role played by iamitivity in the tense-aspect systems of Australian languages, and shows how states and changes-of-state are often perceived as constituting something like a natural semantic classic, as soon as they involve stage-level properties. The combination of this iamitive dimension with a progressive reading for INCH, is also evocative of recurrent types of tense-aspect markers found in Asia, cf. e.g. Korean and Japanese—in the latter language, the tense marker *-te iru* is well-known for its high polyfunctionality across present progressive, perfect or past perfective meanings cf. e.g. Sugita (2009).

I should elaborate at this stage on another important empirical observation made in Caudal, Dench & Roussarie (2012), namely that CAUS verbs can lexically describe *bona fide* activities (13).[14] It is therefore impossible to even associate CAUS with an inherent telic meaning[15]—which further weakens the role of telicity in INCH/

14. *Pace* an unfounded generalization by an anonymous reviewer that CAUS verbs must be telic, in spite of the clearly contradictory empirical generalization introduced above that CAUS verbs 'can denote all aspectual types of dynamic verbs'—i.e., that they can *also* denote activities. Causality is in fact not encoded by CAUS—only subject control over an event is.

15. Contrary to what an anonymous reviewer assumed, object-denoting roots are neither impossible to associate with INCH in Panyjima, nor even rare in that respect, see Dench (1991)—and they certainly could not be regarded as 'culminating' roots (and neither can *kutu-*, b.t.w.). 'NAdj' roots simply do not have any aspectual content in Panyjima, or at least not more than a mundane adjectival/nominal property-denoting predicate; positing

CAUS alternations, and puts the final nail into the coffin of the view that Australian INCH/CAUS paradigms are about non-controlled vs. controlled change-of-state verbs ((13) does not involve any change-of-state at all). In fact, this demonstrates that CAUS is also a very unfortunate label for such paradigms, as they need not be causative in the strict sense of the term.

(13) *Panyjima* (Caudal, Dench & Roussarie 2012:131)
panha-kutha kutharra witi-ma-yi-ku
that-DU two play-CAUS-RECIP-PRES
'Those two are playing with one another.'

To add further complications, let us now turn to the sort of INCH and CAUS derived verbs found in Caudal, Dench & Roussarie (2012:122-136) to involve object-denoting roots. Given a root N, an INCH-verb thus formed can take on e.g., an impersonal existential, stative meaning 'there are N' cf. (14), or simple property ascription stative 'Subject is an N' reading (cf. e.g. *pirri-yayi-Ø* 'be afternoon' Dench (1991:31)), and of course a change-of-state reading 'Subject becomes an N,' cf. e.g. *warnku-wayi-Ø* 'become a bend' (speaking of a river bending at some point) Dench (1991:31), etc. With a CAUS conjugation marker, the object denoted by the root can either be the entity denoted by the internal argument of the causative event predicate (15), or an entity related to the internal argument's denotation.[16] But overall, telicity is not mandatory in such patterns; it is merely common (and even then culmination is not warranted—as we will see below).[17]

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the existence of 'culminating' nominal/adjectival roots as the reviewer suggested does not correlate with basic Panyjima facts. Culminating verbal roots do exist in Panyjima though, but pertain to a closed class, limited number of frozen inflected verbs.

16. Interestingly, while the causative CAUS nominal derivation type is well represented in SAE languages and often quite productive (cf. transitive *N-ize* in English, or *N-iser* in French, etc.), the INCH pattern seems to be only represented in its change-of-state form in SAE (cf. e.g., reflexive *-ize* derived verbs in English, *se N-iser* verbs in French—none of which can have the kind of stative reading exemplified in (14), nor the 'be an X' reading I mentioned above). It confirms the observation already made above in note 7 about the absence of stative deadjectival verbs in French 2nd group, i.e., further supports the view put forth here that Australian languages do not pattern like SAE in their derivational aspectual grammar for verbs—and symmetrically, further undermines the opposite view expressed by an anonymous reviewer.

17. As noted by an anonymous reviewer, such denominal verbs are cross-linguistically common—this is a well-known-fact since at least Clark &

(14) *Panyjima* (Caudal, Dench & Roussarie 2012:133)
karla wantha-nma jinta-yi-rta, muthu-wayi-jara juju-ngarli
fire put-IMP coal-INCH-FUT cold-INCH-MIGHT old man-PL
'Build a fire for coals ("so that there are coals"), as the old people might get cold.'

(15) *Panyjima* (Caudal, Dench & Roussarie 2012:132)
palangu karla-ma-larta nharnu-ngka!
there fire-CAUS-FUT sand-LOC
'(We'll) make a fire there (near where you are) on the sand.'

Finally, note that while INCH/CAUS derived verbs in Panyjima seem overwhelmingly productive, obvious cases of lexified verbs can be found, cf. *yurri-ngka-L* armpit-LOC-CAUS 'aim gun at,'[18] or *thurla-ngka-ma-L* 'to offend somebody,' lit. 'eye-LOC-CAUS.' This somewhat mitigates the aspectual deficiency of the Panyjima verbal lexicon, but only in a limited way, as such lexified derived verbs did not seem extremely frequent in Alan Dench's data.

## 2.2 From Panyjima to the Pilbara, and the whole of Australia

Although Caudal, Dench & Roussarie (2012) did not elaborate on this, similar phenomena obtain in the verbal lexicon and morphosyntax of many Australian languages. Thus Dench (1995), Sharp (2004), Westerlund (2015) among other works, show that other Pilbara languages possess comparable derivation patterns, with also comparable semantic properties—and again, a clearly iamitive/progressive-semantics, cf. (16)-(22).

(16) *Nyangumarta* (McKelson 1989: 81) in (Sharp 2004:221)
jarri-nyi-rri
INCH-NFUT-3SG.S
'The man disappeared into the scrub /He became in the scrub, he became not visible.'

(17) *Nyangumarta* (Sharp 2004:154)
wangka-marta jarri-nyi-yi, pala-nga wangka yiji
close-ATTEN INCH-NFUT-3PL.S that-LOC close really
'They were getting closer and then (they became) really close.'

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Clark (1979), and I am well aware of this, since Caudal, Dench & Roussarie (2012) capitalized on the former reference. However, and contrary to what the reviewer implied, this similarity does not take away anything from the essential aspectual typological differences existing between Australian derived verbs, and say, deadjectival verbs in SAE languages.

18. This metaphorical, conventionalized use derives from 'old times' habits of actually pointing a spear a someone in a menacing way, by putting it under one's armpit. Cf. French. *mettre en joue* (lit. 'put [gun] into cheek') 'aim a gun at someone,' for a similar conventionalized metaphor.

(18) *Nyangumarta* (Sharp 2004:215)
jarri-nyi
smell-INCH-NFUT
'S/he/it was beginning to decay.'

(19) *Nyangumarta* (ibid.)
jarrati jarri-nyi
headache INCH-NFUT
'His /her head ached /began to ache.'

(20) *Nyangumarta* (ibid.)
karukaru jarri-nyi
nausea INCH-NFUT
'S/he became nauseated.'

(21) *Nyangumarta* (McKelson 1989:106) in (Sharp 2004:215)
pirru jarri-nyi-rni wika-ja
blister INCH-NFUT-1SG.S fire-ABL
'The fire has given me blisters.'

(22) *Nyangumarta* (Sharp 2004: 224)
kangkuru pala-ja muwarr-ja mirti marrja jarri-nyi
kangaroo that-ABL word-ABL run very INCH-NFUT
'The kangaroo, after speaking was running really fast.'

Similar facts also abound in other language families found in Western Australia—cf. e.g. Thieberger (1993) for references concerning language families south of the Kimberley—and beyond, for instance in Mantharta (Austin 2015), Ngumpin-Yapa (e.g. Warlpiri, cf. Browne 2020; Simpson 2012, a.o.), Arandic (Wilkins 1989), Tangkic languages (Evans 1995), etc.

A language like Ngarla (Westerlund 2015) perfectly illustrate the morphological cycles underlying the sort of CAUS/INCH system found in Panyjima: Ngarla combines (a) INCH/CAUS paradigms comparable to that of Panyjima (which Westerlund calls instances of *zero derivation*) and (b) verb compounds associating a nominal/adjectival root with an inflecting verb pertaining to a closed-class set of grammaticalized verbs; said inflecting verbs seem to associate with actional-aspectual constraints (Westerlund 2017)—but none of them seems to have a unique, clear aspectual function; two distinct roots appear to be intransitive INCH-making verbs, one of which *ngarri-Ø* seems to have a non-controlled (possibly unbounded) change-of-state meaning, while the other *karri-Ø* seems to have a non-change-of-state, primarily stative meaning—two others are marked as transitive; *ja-L* and *ma-L* seem to construe subject-controlled transitive dynamic predicates, and tend to split more or less along the lines of telic vs. atelic

dynamic events.[19] These facts confirm the empirical generalizations made above from Panyjima, i.e., (a) that subject control rather than causativity is essential to organizing derived verbs into two sub-sytems, (b) that states and unbounded changes-of-states are seen as patterning together, syntactically speaking and (c) that telicity and change-of-state, as well as event dynamicity, are frequently encoded at a higher level than lexical roots.

Providing an areal-typological study is well beyond the scope of the present paper, but the amount of converging semantic facts is truly overwhelming across the entire continent. Even non-Pama-Nyungan languages, where the corresponding morphology is not so prevalent, routinely exhibit related semantic patterns. Thus, Iwaidjan languages (spoken in the Cape Coburg area, in northwestern Arnhem Land) possess *-mi-* derived so-called inchoative verbs (Singer 2006:23-24) whose semantics matches of Panyjima INCH derived verbs, cf. (23). These are used to form deadjectival/ denominal verbs.

(23) *Mawng* (Singer 2006:23)

| | | | |
|---|---|---|---|
| naka-pa | i-lurtpujpi-ny | ja | i-wiya |
| DEM.DIST.MA-EMPH1 | 3MA-short.INCH-PP | MA | MA-hair |

'His hair is shorter.'

Furthermore, in some languages with rich auxiliary/complex predicate-based verb systems, instead of verbal derivations, the so-called causative/inchoative alternation seems to have crept into said complex predicate/auxiliary system. ~~Thus~~, in Jaminjung (Mirndi, non-Pama-Nyungan), the 'BE' auxiliary *-yu* (an inflection 'generic verb') has both stative and *bona fide* inchoative readings, and seems cognate with the 'SAY, DO' auxiliary *-yu*(*nggu*), cf. Schultze-Berndt (2000:436 *sq*.)—they contrast with the dynamic transitive (and sometimes causative) auxiliary 'PUT' (*-arra*).[20] Bardi, a Nyulnyualan language (non-Pama-

19. However, Westerlund's data seems to be more complex than the theoretical generalizations he states about the aspectual function of these verbs, cf. Westerlund (2015:42). In particular, it ~~is~~ that *ngarri-Ø* frequently marks unbounded changes-of-state.

20. Note that the Iwaidjan inchoative suffix *-mi* is itself derived from a pan-Australian root *mi* precisely meaning 'say, do, (be)' (Dixon 2002). The origin of inchoative suffixes seems to greatly vary though, (Dixon 2002:75)—in contrast with causative suffixes, where the pan-Australian *ma* ('do, have, hold') root appears to be very widespread as a source, and is formally observable in many languages. Unsurprisingly, verbal roots are recurrent in the morphological development of inflectional affixes; cf. Schultze-Berndt (2003) for a diachronic perspective on this in the whole Australian domain.

Nyungan), offers related paradigms (Bowern 2004:326-328; Bowern 2012:166) distinguishing complex verb patterns comprising inchoative/stative resultative verb meanings and involving the *-joo-* 'do, say' light verb (effectively used almost as a derivational affix), from other complex verb patterns involving other light verbs (the latter altogether lacking lexical stative meanings). We are there looking at the development of a novel INCH/CAUS paradigmatic opposition. This demonstrates that the morpho-syntactic nature of this essential opposition does not determine how prevalent it is; this fact is in line with what we know about the evolution of ~~Australian~~ inflectional systems—especially with respect to so-called 'conjugation classes' and 'complex verbs'—in Australian languages, cf. e.g. Dixon (2002); Schultze-Berndt (2003).

Overall, the abundance of INCH verbal morphology in Australian languages—especially in Pama-Nyungan languages, where they account for a substantial number of intransitive verbs—and the non-always causative/culminating nature of CAUS derived verbs makes for a massively underspecified lexicon with respect to telicity. Such a type of verbal lexicon contrasts sharply with the average 'Standard Average European' verbal lexicon, where event delimiting devices such as e.g., incremental theme roles, or bounded scalar functions, are often attached to verbal roots.[21] Moreover, verbal derivation needs to be considered as a

21. Although such a proposal largely falls without the purview of the present paper, I would like to contend that even so-called aspectual derivational morphology in Slavic languages might well be semantically lexified/frozen to a large extent (with the exception of a truly productive and transparent affixes), and therefore should also ascribe a large amount of telicity/event culmination-related content—and in general, event delimitation/quantification content, cf. Corre (2015), but not so-called 'viewpoint aspect' à la Smith (1991)—to lexical verbal roots. A similar case has been consistently made by authors such as Ju Maslov for decades; see also Matveeva (2015). Note that while many works from Filip (2008) to Corre (2015) argue in favor of ascribing some Aktionsart-parameter function to e.g. Russian superlexical preverbs (some type of telicity for Corre), these works nevertheless acknowledge that such preverbs form verbs whose lexical semantics ~~seems sometimes~~ very idiosyncratic. And even assuming that those preverbs are telicity-associated exponents as Corre does, does not necessarily warrant a compositional analysis at the morphology-semantics interface, especially given the changeable nature of said telicity meaning—and if one has to postulate a semantic lexification inclusive of the preverb element for lexical semantic reasons unrelated to aspect, it renders the compositional analysis of the *supralexical preverb+verbal root* stem not only unnecessary, but unwelcome. These could well be non-compositional properties of a lexical hierarchy—a bit like e.g. conjugation classes in

*system* here—SAE languages do not generally possess anything coming close to the INCH/CAUS opposition. Because of INCH morphology, stativity occupies a semantic place in the grammar of verbal derivation (and therefore in the grammar of the verb in Pama-Nyungan languages), which it clearly does not receive in SAE languages; and intransitive INCH verbs do not contrast so much with causative transitive verbs, than with simply dynamic transitive verbs, both telic and atelic—for such is the only systematic aspectual/actional meaning one can attach to CAUS paradigms. This, together with the rarity of change-of-state encoding verbal roots in Pama-Nyungan languages, makes for a distinctly more stative or generally atelic verbal lexicon—or at least one where the stative/controlled dynamic event (not the inchoative/causative distinction) is distinctly salient, and where telicity takes on a much less important role than in say, SAE languages. The next section of this paper will discuss substantial additional evidence supporting such a view. As an interim, I would like to observe again how woefully inadequate (and misleading) CAUS and INCH labels are in the context of Australian languages, since neither causality/telicity nor inchoativity *qua* change-of-state are respectively necessary semantic properties for the associated paradigms.[22]

Before closing this section dedicated to the lexical/derivational aspectual semantics of Australian verbs, it should also be stressed that the relative aspectual indeterminacy of lexical aspectual information in some languages, compounded by widespread inflectional aspectual underspecification, is probably the driving force behind the proliferation of aspectuo-temporal clitics or particles across Australian languages,

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French, where the 2nd group verb tends to select for non-atelic verbs (Caudal 2016), but cannot really be argued to have a unique compositional semantic contribution. See e.g. Janda (2007) for related analysis of the verbal lexicon of Russian, in relation to aspectual morphology.

22. The very names of those paradigms seem to lead authors unfamiliar with Australian facts to misinterpret and misrepresent them—which, despite their inadequacy, have been maintained across grammars and theoretical works alike. I personally suspect those labels were proposed in the first place because of expectations (i.e., tacit empirical generalizations) originating in theoretical and descriptive knowledge gained from the study of SAE languages, and permeating much of the theoretical and descriptive literature. Many of the detailed comments by an anonymous reviewer also illustrated similar confusions (and were explicitly based on the reviewer's (incorrect) conviction that Australian INCH/CAUS paradigms essentially pattern like French with respect to verbal derivation and inflectional classes); they were particularly helpful in that they forced me to clarify a number of points, and to make this paper both clearer, and more self-contained.

both Pama-Nyungan and non-Pama-Nyungan. Some of these markers are almost universally found in Australia, cf. e.g., the temporal ordering/event presuppositional *=rru* clitic often used in combination with past inflected verbs—said past being aspectually underspecified—to convey e.g. *bona fide* perfect or past perfective meanings in Panyjima (Ritz, Dench & Caudal 2012); see also Ritz & Schultze-Berndt (2015) for a related clitic in Jaminjung, a Mirndi (non-Pama-Nyungan) language, and Browne (2020) Pama-Nyungan, Australia for a preliminary areal study, and a more detailed account of related forms in Warlpiri and Warlmanpa, two Ngumpin-Yapa (Pama-Nyungan) languages. This demonstrates the grammatical need in Australian languages for categories further specifying what it is essentially very flexible, 'lightweight' aspectual content at the simple clause level. And like e.g., discourse connectives, these categories operate beyond said simple clause level (and in effect, simple event descriptions)—we will get back to this important fact in section §3.

## 3. Construing non-culminations: from 'partitive culminations' to avertives

Let us now turn to grammatical, inflectional aspectual parameters in Australian languages. They too, exhibit a substantial amount of aspectual underspecification or aspectual deficiency, as we will see.

### 3.1 'Partitive culminations' in Australian languages

The notion of 'non-culminating accomplishments' was formulated on the basis of Salish datapoints (Bar-el 2005, Bar-el et al. 2006), cf. (24), but similar linguistic facts were soon uncovered in numerous unrelated language families and phyla, e.g., Caucasian (Nash 2017) Turkic, Finno-Ugric (Tatevosov 2008; Tatevosov 2020), Indo-European languages, including Indo-Iranian (Arunachalam & Kothari 2011), Romance/Germanic (Martin & Schäfer 2017) and Slavic (Altshuler 2014; Filip 2017), Papuan (Kroeger 2017), Sino-Tibetan (Koenig & Chief 2008), Kra-Drai (Koenig & Muansuwan 2000), Uto-Aztecan (Copley & Harley 2014), Austronesian (Paul, Ralalaoherivony & Swart 2020), and of course, Australian languages (Bednall 2019), a.o.[23]

23. Of course, one should exert some caution in such a wide crosslinguistic application of a unique comparative concept, as it might lead one to neglect some important semantic (and pragmatic) differences. As correctly pointed

(24) *Sḵwx̱wú7mesh* (Bar-el 2005:82)

| | | | | |
|---|---|---|---|---|
| chen | ilhen | kwi | sḵawts welh | haw |
| 1S.SG | eat | DET | potato CONJ | NEG |
| k-an | | i | huy-nexw | |
| IRR-1CNJ | | PART | finish-TR(LC) | |

'I ate a potato but never finished it.'

I will here generalize the widely used concept of 'non culminating accomplishments' to all types of telic events, as they do seem to arise in some languages, as—to a limited extent at least—in Hindi (Arunachalam & Kothari 2011) (subject to speaker's variation in acceptability judgements) and, *pace* Bar-el (2005), Squamish/ Sḵwx̱wú7mesh, see Jacobs (2011). I will refer to the denotation of this broader class of non-culminating utterances as *partitive culminations*, or PCs—in the sense that such utterances refer to the cancellation of at least one subevent normally contributed (or implicated) by a telic predicate associated with a (contextually construed or inherent) past perfective viewpoint meaning: part of the development phase, the result normally expected to hold, or the entirety of the event.

Indeed, Iwaidja seems to offer both accomplishment-based (25) and achievement-based PCs (26), see also Bednall (2019) for similar examples in Anindilyakwa, and below for additional datapoints in other Australian languages—the normally described event is then either averted, or its expected results do not hold. Note that the conjunction *ba* 'but' is optional in (25)-(26). (27) makes non-culmination even clearer by resorting to reduplication, and the 'durative event' intonation used in this utterance (::) (cf. Mailhammer & Caudal 2019's so-called *linear lengthening intonation*), which adds intensity to the (vain) attempt made, and further emphasizes the verb's non-culminating, by putting additional stress on the (marked) duration of its process, pre-culmination part. And, as a consequence, it contributes to severing up any possible link between a causation/subject-controlled content and

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out in Martin (2019), there are at least two cross-linguistically distinct sources for so-called non-culminating accomplishments, namely (a) some kind of 'defeasible causative' content either lexically encoded by the verb (*qua* some sublexical modal meaning à la Koenig & Davis (2001), see Martin & Schäfer (2017)) or marked by voice/case-related elements, vs. (b) some kind of aspectually deficient inflection. The relation of so-called 'defeasible causative' non-culminating accomplishments to aspectual parameters is of course more limited than that of inflectionally determined non-culminating accomplishments—it has little or no connection with e.g., resultativity or imperfectivity. I will come back to this later.

(25) *Iwaidja* [Context: some agent tried in vain to cut a sizable tree] (Author's fieldwork)
ri-ldalku-ny (ba) karlu
3M.SG>3SG.O.ANT-cut-ANT (CONJ) NEG
'He tried to cut it but couldn't. (it was too hard…)'

(26) *Iwaidja* (Author's fieldwork)
ri-wu-ng (ba) karlu
3M.SG>3SG.O.ANT-hit-ANT (CONJ) NEG
'He hit/tried to kill it it but nothing (he didn't kill it).'

(27) *Iwaidja* (Author's fieldwork)
ri-ldalku-ku-ny:: arlarrarr
3M.SG>3SG.O.ANT-cut-RED-ANT:: nothing
'He repeatedly tried to cut it (= tried hard to cut it), but in vain.'

the event predicate's culmination (or in some clear achievement cases, a target result).

Partitive culminations have been claimed to be associated across languages with different types of morphosyntactic parameters, especially voice, actionality, and tense-aspect. Voice and actionality appear to play a central role in the encoding of PCs in e.g. (some) Salish languages (Bar-el 2005; Sardinha 2018), but also e.g. Korean (Beavers & Lee 2020). This is reflected in Demirdache & Martin (2015)'s Agent Control Hypothesis (ACH) about PCs, stemming from the observation that the loss of agent control caused the loss of a PC-reading in e.g.

(28) French
Marie lui expliqua le problème de l'analyse
Marie him.OBL explain-PS.3SG the problem of the.analysis
'Marie explained to him why the analysis was wrong (but he didn't understand).'

(29) French
Ce résultat lui expliqua le problème de l'analyse
this result him.dat explain-PS.3SG the problem of the.analysis
'This result made him understand why the analysis was wrong (*but he didn't understand).'

French, as shown in (28)-(29), adapted from Demirdache & Martin (2015).

The ACH relates to aspect *qua* causativity, i.e., the combination of a causing subevent being controlled by the subject entity, and change-of-state; it is clearly the source of the PC reading observed in French.

'Weak perfective tenses' (Martin 2019) or so-called 'neutral tenses' (Nash 2017) à la Smith (1991) are often considered as the other main source of partitive culminations (cf. note 23; see also e.g. Koenig & Muansuwan (2000), Koenig & Chief (2008), Altshuler (2014), for related notions). I am aware of at least two Australian languages clearly encoding in their TAM systems 'weak' perfective readings of aspectually *underspecified* tenses capable of PC readings, contrasting with some 'strong' tenses incapable of giving rise to PC readings. The

first is Anindilyakwa[24] (Bednall 2019), with a contrast between its *REAL-* ~ *-Ø* vs. *REAL-* ~ *-PST* paradigms—and the second is Kayardild, with its ACtual ('strong,' though temporally underspecified tense) vs. past (a 'weak,' though temporally specific tense) morphology, cf. Caudal (2022).

(30) *Anindilyakwa* (Bednall 2019:206)

| | | | | |
|---|---|---|---|---|
| n-alyubaru-nu=ma | y-akina | yinumaninga | akena | nara |
| REAL.3M-eat-PST=CTYP | M-that | M.food | but | NEG |
| kin-alyubari-na | | | | |
| IRR.3M>M-eat-PST | | | | |

'He ate the wild apple, but he didn't eat it.'[= didn't finish it] **('weak perfective reading'; PC)**

(31) *Anindilyakwa* (Bednall 2019:206)

| | | | | |
|---|---|---|---|---|
| *n-alyubaru-Ø=ma | y-akina | yinumaninga | akena | nara |
| 3M-eat-USP=CTYP | M-that | M.food | but | NEG |
| kin-alyubari-na | | | | |
| IRR.3M>M-eat-PST | | | | |

'He ate the wild apple, but he didn't eat it.' **('strong perfective'; no PC)**

(30) differs from most other PC patterns I am aware of, in that it actually involves a plain, straightforward negation of the event previously described. The cancellation does not modulate the degree of development of a gradual change-of-state *via* e.g., 'finish,' and originates in a plain negative utterance directly contradicting the preceding clause. The non-negative, partial development type of contradiction exemplified in (24) is also possible in Anindilyakwa, but Salish does not seem to possess the kind of fully negative cancellation exemplified in (30).

Similar negation-based PC-patterns can be found across many Australian languages, associating a (contextually or inherently) past indicative matrix clause with a negative particle on the right edge of the VP, cf. (32)-(33). It is unclear whether all the associated perfective tenses qualify as *bona fide* 'weak' perfective tenses as in Anindilyakwa and Kayardild, though—I will get back to this below.

24. Note that Anindilyakwa is deprived of any inflectional imperfective; it must resort to other means (e.g., reduplication) to construe non-culminating readings of achievement verbs. Australian languages frequently lack inflectional imperfectives or progressives. This is not a typologically rare phenomenon—it is exemplified by such mundane SAE datapoints as the *Perfekt* in the context of the German tense system, cf. e.g. Caudal & Schaden (2005), which (like the Anindilyakwa underspecified past) is also capable of conveying imperfective readings with accomplishment verbs.

(32) *Rembarnga* (McKay 1975:258)
par-ŋu-ŋ wapa
3AUG.A >3O-eat-PP NEG
Ø-kakku-ɳuru-pop-miɲ
3MIN.IMPL-properly-stink-waft.around-PP
'They atre (tried to eat) [the kangaroo], but no good [= in vain]. It was really stinking.'

(33) *Warrwa* (McGregor 1994:60)
kirlaykirlay ngirraana-ngany ngirrmangkanyjina-ngany marlu
chase.RED they:took:him-APP they:fought:together-APP NEG
'They chased him, and fought, but without success.'

The negative particle involved in structures like (30)/(32)/(33) is typically a sentential negation particle ('not'), a negative interjection ('no') or a negative pronoun-like word ('nothing'), and seems quite systematically anaphoric; it can be seen as denoting the negation of the propositional content of the previous clause—the overall sequence seems to form a reduced biclausal structure (see Caudal (2022) for a more detailed discussion), directly encoding non-culmination, an absence of expected results, or a vain attempt at even starting an achievement-type event. It should be furthermore stressed that (a) this class of structures seems to associate with conventionalized intonational patterns, (b) that the relevant negative particle is sometimes distinct from sentential negation—it can even be a specialized negation only occurring in such patterns[25]—and (c) that these structures seem to associate with non-truth conditional, expressive content, especially a 'bemoaning' meaning ('alas') and/or a mirative/mistaken thought meaning ('unexpectedly'). The combination of (a), (b) and (c) strongly suggests that such patterns do not constitute a mere productive discourse-structural phenomenon, but an entrenched type of construction,[26] and therefore differ from discourse-structural, pragmatic PCs akin to e.g., (24), where at least part of the event is cancelled by a subsequent discourse segment. The latter

25. Cf. e.g. *najing* in the Bilinarra equivalent of this construction, *najing* being a loanword (English 'nothing') which is distinct from sentential negation *gula* (Meakins & Nordlinger 2014), and seems to only appear in PC structures.

26. This sets them apart from e.g., PC patterns in French, where the culmination cancellation can only be of the pragmatic, discourse-structural type exemplified in (30)-(31), as well as most other crosslinguistically known PC patterns, as the latter cannot involve a straightforward negative follow up utterance, and do not seem to offer conventionalized patterns comparable to those discussed above. Therefore, *pace* what an anonymous reviewer claimed, even though they also have partial negation or 'pragmatic' PCs, Australian languages substantially differ from other languages known so far to convey PCs—regardless of whether or not their PC patterns are connected to aspectually deficient inflections.

kind of configuration seems to be also possible in languages possessing *bona fide* 'weak' perfective tenses such as Anindilyakwa or Kayardild. Although it is unclear how frequent such tenses are in the phylum, and whether they are systematically associated with biclausal negative structures such as (30)/(32)/(33),[27] overall, these patterns *de facto* set Australian languages apart from other languages known to exhibit PCs—Australian PCs seem more widely compatible with achievement predicates, and can be encoded by conventionalized, straightforwardly negative constructions, or plain negative follow up utterances directly contradicting an initial utterance, unlike the most commonly identified type of PCs so far.[28]

To make further sense of the above facts, I will now evoke Léa Nash's analysis of the Georgian aorist (Nash 2017), also capable of giving rise to PC readings. She proposes that this tense should be treated as deprived of any aspectual functional head (i.e., as structurally lacking)—a type of configuration she calls *Aspectual Deficiency as Structural Impoverishment*, ADSI for short. I would like to hypothesize here that PC-inducing inflections reflect on tenses being either plain cases of ADSI—see e.g,. the Anindilyakwa and Salish 'zero paradigms,'[29] which seem to be both temporally and aspectually non-specific—or at least aspectually underspecified (which though

27. As aspectually underspecified tenses are extremely widespread in Australia, it sounds rather unlikely though.

28. Australian languages notably stand out by their ability to generate PC-like patterns with any type of achievement verb and by the fact that PCs and avertives overlap to a large extent ~~in Australian~~. But one should also bear in mind the obviously central role played by inflectional aspectual underspecification/deficiency in bringing about PC patterns crosslinguistically—including in languages like Salish and Hindi. In comparison, the purely lexical kind of PCs found in e.g. French merely approximate the meanings of PCs deriving from inflectional aspectual deficiency—a bit like 'try'-verbs approximate the meaning of inflectional avertives, as we will see. Therefore, so-called French PCs can hardly be compared to such datapoints, in a sense, and constitute empirical outliers. I must leave those issues open though, as providing a crosslinguistic theory of PCs (including one grounded in a crosslinguistic study of aspectual inflections) is well beyond the scope of the present paper.

29. Salish non-culminating accomplishments are also unmarked for tense-aspect inflection, i.e., involve a 'zero inflection' paradigm as well. Note however that if we take the REAL vs. IRR Anindilyakwa prefixes to form inflectional TAM circumfixes in combination with tense suffixes, then we end up with a reduced/least marked TAM paradigm, rather than a 'zero tense' paradigm. Whether or not Anindilyakwa TAM prefixes and suffixes form a compositional system involving two morph(eme)s, or non-

not straightforward instances of ADSI, also involve some degree of aspectual indeterminacy)—the Kayardild 'past' ~~is~~ certainly such a tense. Among relevant aspectually underspecified tenses, I believe one should pay special attention to tenses synchronically undergoing a significant change in their aspectual contribution, more specifically tenses not having completed a 'perfectivization' process (Squartini & Bertinetto 2000), such as e.g. the so-called Hindi perfective. It is in fact a former *bona fide* perfect, and is often described as such in grammars. I will here propose to view it as a tense having only partially developed a perfective meaning, in that it defeasibly entails a culminating reading when it marks telic utterances, instead of semantically expressing such a reading—in other words, I am proposing that we should treat at least some 'weak perfectives' as a matter of ongoing diachronic change causing incomplete perfectivity—which can also be seen as a matter of aspectual deficiency (though not vacuity/structural impoverishment).

Whether or not each relevant tense should involve incomplete perfectivity, another kind of aspectual underspecification, or a more radical case of ADSI, needs to be discussed on a form-per-form basis, but aspectuo-temporally underspecified tenses are very common in TAM systems of Australian language—where *vice versa*, (at least relatively strict) inflectional oppositions between perfective/imperfective paradigms as found in e.g. Romance, seem to be rare, and subject to sudden changes. See e.g. the Murrinh-Patha underspecified 'non-future' tense marker and its opposition to a past imperfective paradigm (Nordlinger & Caudal 2012), or the (now vestigial) synthetic perfective/imperfective past tense opposition in Jaminjung (Schultze-Berndt 2010, 2012), the need in many Australian languages for progressive/imperfective periphrases in the absence of adequate inflectional paradigms, etc. Such facts are suggestive of a pervasive aspectual deficiency of tenses in the phylum.

In addition to plain negative particles forming reduced biclausal constructions as we have just seen above, certain languages possess special particles with seemingly similar interpretative effects, e.g., Arrernte *apale* 'wrongly,' or Nyangumarta *puru* 'merely/just,' but syntactically behaving like VP-modifiers—not anaphoric negations of a previous clause, ~~(35) (36)~~. They too cannot be equated with 'pragmatic' PCs such as (30)-(31).

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compositional circumfixes involving a single discontinuous morph(eme), is a difficult question I must leave here open.

(34) *Arrernte* (Wilkins 1989:329)

| the | nge-nhe | apale | twe-ke |
|---|---|---|---|
| 1SG.A | 2SG-ACC | wrongly | hit-PC |

'I wrongly hit you. (i.e., 'I made a mistake in hitting you; either I meant to hit someone else, or I meant to hit you but missed or hit you in the wrong spot.')

(35) *Nyangumarta* (Sharp 2004:182-183)

| puru | ji-na-kanu | maruntu | kulpa-nya-la | Munu=rla! |
|---|---|---|---|---|
| merely | do-NM-after | Gould's.Goanna | return-NFUT-3SG.LOC | NEG=FOC |

'The goanna couldn't find him and returned'

The latter particle is cognate with *purtu*/*putu*, found in several Western Desert languages, including Pintupi-Luritja (Rose 2001) and Yankunytjatjara (Goddard 1983). Their meaning can be described as avertive in the sense of Kuteva (1998), Kuteva et al. (2019), i.e. as indicating that the speaker expected some event to take place, but that it did not.[30] They often translate by 'X can't V' in a present tense utterance, or 'X couldn't V' in past tense utterance (36), but can also be rendered as meaning 'in vain, without success.'

(36) *Yankunytjatjara* (Goddard 1983:247)

| ngayulu | puṯu | nya-ngu |
|---|---|---|
| 1SG(ERG) | in.vain | see-PST |

'I couldn't see/find it.'

In short, the above Australian constructions demonstrate that some PC-like patterns can involve not only readings akin to 'non-culminating achievements,' but also a wealth of aspectual variants—which, in fact, are exactly reminiscent of the sort of aspectual variation found in Kuteva et al. (2019) to be observable in 'avertive' grams, while lacking some of the properties of *bona fide* inflectional avertives (i.e., their modal content). I will take this to suggest that structures exemplified in (32)-(33) (and possibly (34), but probably not (35)-(36)) stand halfway between a 'canonical' PC pattern, and a full-fledged avertive structure. Like inflectional avertives, I will argue that such structures actually denote a complex event structure, optionally compounding an attempt event (typically some preparatory-stage subevent, or a partial development event; however non-agentive achievement utterances seem to generally omit such an attempt event), and a 'failure,' negative

30. This marker is also cognate with the Martuthunira contrastive clitic *=lpurtu*, which conveys that something contrary to the speaker's expectations happened (Dench 1995); cf. also the 'in vain' *purtukarri* particle in Ngarla (Westerlund 2015) (probably from *karri* 'take' and *purtu-* 'in vain' similar to e.g. Luritja *purtu/purtulirri* 'do in vain,' cf. Douglas 1988:75-76).

event[31], cf. Caudal (2022)—following Bernard & Champollion (2018), I will assume that negative events are referentially existent. But unlike *bona fide* inflectional avertives, such mixed avertive-PC structures do not have any inherent modal content (they do not associate with volitional/proximative meanings, in particular)—so that we should rather analyze constructions involving *purtu* cognates as periphrastic avertives; I will get back to this below.[32]

Note that such an overlap between PCs and avertives does not seem to hold in a language like e.g., French (see Caudal (2022) for more on this); and only a more limited overlap seems to be observable in e.g. Salish/Hindi, where achievement-based, avertive-like PCs seem rarer, or more contextually constrained (cf. Arunachalam & Kothari 2011; Jacobs 2011:177).[33] Finally, it should also be stressed again that the often weaker causative content associated with dynamic verbs in Australian languages predicts a relatively greater indeterminacy between telic and atelic readings of said verbs; this is also probably instrumental in contributing to construing non-culminating, PC-like readings of various verbs (and possibly blurs to some extent the boundaries between 'atelic' and 'non-culminating (telic)' readings of certain verbs, as well).[34]

31. Hence the irrelevance of a pragmatic, event culmination entailment cancellation-based analysis, for such data points.
32. It seems to me that the Tohono O'odham *cem* so-called avertive belongs to the class of mixed PC/avertive items, as it does not seem to have underlying modal meanings. Interestingly, Copley & Harley (2014) ~~also~~ argue against an analysis of *cem* avertives in terms of implicated culmination.
33. Salish inflectional PCs admit 'non-culminating achievement' utterances, especially with an avertive-contrary to fact 'try to' meaning in the latter case (Jacobs 2011)—and can derive PC readings from any accomplishment type. Salish languages seem to behave a bit like Australian languages in this respect—but they appear to lack the kind of near-avertive PCs discussed here.
34. Australian languages would thus qualify as 'I-languages' in Ritter & Rosen (2000)'s crosslinguistic aspectual typology. Clearly, telicity construal tends to be more context-dependent in Australian languages than in say, SAE languages. And when relatively clearly telic verbs are involved, i.e., mostly non-derived achievement verbs (these are common across e.g. non-Pama-Nyungan languages with large verbal lexica), viewpoint aspect seems to be in a position to disregard at least part of the culminating event they normally encode—and at least in certain conventionalized constructions with negative particles, or in combination with dedicated avertive particles.

### 3.2 Avertives in Australian languages

This brings us naturally to discuss *bona fide* avertive or frustrative utterances (Kuteva 1998) in Australian languages, possibly the most important, and only clearly grammaticalized type of non-culminating utterance widely found in Australia; as opposed to the tenses involved in PC patterns, such inflections appear to entail (or implicate) non-culmination. Following Clendon (2014), I will consider so-called frustratives to be a subtype of avertives requiring an agent's volition (i.e. a controlling subject agent), and *vice versa*, I will treat avertives as a wider category subsuming both agentive/volitional avertives (i.e., frustratives) and non-agentive/non-volitional avertives. See e.g. (37)-(38), where the past irrealis inflection has avertive uses (a very common feature of non-Pama-Nyungan languages; cf. Caudal 2022). Most Australian languages do not appear to lexicalize or grammaticalize non-volitional vs. volitional avertives as separate categories, but this is not always true crosslinguistically; see e.g., French *faillir*, vs. *vouloir*$_{past\ perfective}$ + INF, which lexicalize non-volitional vs. volitional avertives.

(37) *Iwaidja* (Pym & Larrimore 1979:76)
maju ngan-ambija-na
WANT 1SG.PCF-laugh-PCF
'I was going/wanted to laugh (but I didn't').'

(38) *Iwaidja* (Author's fieldwork)
na-ngartbun-a arlirr
3SG.PCT-fall-PCF tree
'this tree was going to fall/nearly fell (but it didn't).'

It is crucial to note that the failure, negative event entailed by structures like (37) seems to be more difficult to cancel than that entailed in (38). This can probably be attributed to the presence of an additional modal particle (*maju* 'WANT'[35])—and with particle *wurrkany*, cancelling the failure negative event content would be downright impossible, as we will see below.

However, it should be said that many Iwaidja speakers tend to be reluctant to accept an immediate cancellation of even (38). A positive rhetorical marker such as *burruli* 'good' can facilitate such a cancellation, as shown in (39), where *burruli* plays an opposite role to that of negative particles above, thus possibly constituting some kind of

35. *Maju* is the root form of the 'want' verb in Iwaidja; this is clearly not an accident, as Caudal (2022) establishes that volitional meanings are a major source for Australian avertive inflections—a fact in line with earlier typological findings, as early as Kuteva (1998).

reduced biclausal construction. I take such seemingly biclausal patterns involving a positive or negative polarity item on the right side of an avertive-marked clause to be *conventionalized rhetorical structures*—after Ulrich Detges & Richard Waltereit (2002)'s idea of 'rhetorical routines' being a major driving force behind language change.[36]

(39) *Iwaidja* (Author's fieldwork)

| | | | | | |
|---|---|---|---|---|---|
| nanilda | ba | walij… | lda | burruli, | riwany |
| 3M.SG>3SG.PCF-eat-PCF. | DET | food | CONJ | good | 3M.SG>3SG.ANT-eat-ANT |

'[The dog] looked like he was going to eat the food, and he did.' (lit. 'he did it alright')

In contrast to Iwaidja, while Jaminjung (another non-Pama-Nyungan language) also offers constructionalized past-irrealis marked avertive (reduced) biclausal patterns with a negative word on the right edge of the VP (40), without such constructions, the corresponding *POT:V-IMPF* inflection only involves a weaker pragmatic implicature of a failure event, as it seems to be more readily cancellable, cf. (41)—the latter example being associated with a distinctly productive, non-conventionalized rhetorical structure.

(40) *Jaminjung* (Schultze-Berndt 2000:93)

| | | | |
|---|---|---|---|
| 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).'

(41) *Jaminjung* (Schultze-Berndt 2000:93)

| | | | | |
|---|---|---|---|---|
| yagbali | birdij | gana-w-arra-nyi, | | |
| place | find | 3sg:3sg-FUT-put-IMPF[35] | | |
| 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).'

According to Caudal (2022), Australian avertives are found in two main patterns: (i) as a combination of a past irrealis inflection with a negative particle (or *via* a clause negating the culmination or very occurrence of the previously described event, i.e., by implicature strengthening) or (ii) as some type of inflection combined with a special avertive particle—this can include modal inflections like so-called purposives, but also the past indicative when combined with a

36. With *burruli* in (39), it is impossible to get a full cancellation of the implicated failure without an additional overt utterance, so the routine hasn't reached the reduction stage, and is less syntactified/lexicalized than its negative counterparts—*karlu* ('no') or *arlarrarr* ('nothing') in Iwaidja; cf. (26)-(27).

37. Jaminjung inflecting verbs belong to a very limited closed class, and are de facto light verbs not really endowed with a distinct, straightforward meaning; the lexical glosses here provided should be considered with this in mind.

clearly avertive particle.[38] I am giving below examples in Iwaidja, but numerous similar systems can be found in Australia. These are strongly evocative of a *periphrastic modal system*; thus (42) and (43) differ from (44) in that they do not associate with a past irrealis inflection, but with a present irrealis inflection (FUT) vs. a past indicative inflection (ant). Therefore, *wurrkany* + $V_{FUT}$ *wurrkany* + $V_{ANT}$ structures are semantically equivalent to *wurrkany* + $V_{PCF}$ and their past irrealis content is a conventionalized composite marking in which *wurrkany* plays an essential role—it might be a past irrealis/avertive indicator *per se*, and the verb's inflection ANT/FUT/PCF might act as an agreement feature (see the related analysis of French conditional structures in Anand & Hacquard 2010).

(42) *Iwaidja* (Iwaidja Dictionary)
wurrkany yanara karlu artirra-n
FRUST 3SG.DIST.FUT-go-FUT NEG 3SG.ANT-come.back.ANT
'He was going to go/tried to go, but (no,) he came back.'

(43) *Iwaidja* (Author's fieldwork)
wurrkany awukung ba walij rardudban
FRUST 1SG>3SG.ANT-give-ANT DET food 3MSG>3SG.ANT-leave.behind-ANT
'I tried to give him food but he left it behind.'

(44) *Iwaidja* (Author's fieldwork)
wurrkany nanilda ba walij ba karlu riwany
FRUST 3M.SG>3SG.PCT-eat-PCF DET food CONJ NEG 3M.SG>3SG.ANT-eat-ANT
'[The dog] was going to/tried to eat the food, but he didn't.'

(45) *Iwaidja* (Iwaidja Dictionary)
maju birdirlkbu-ny. Nganduka a-bi-ny?
WANT 3SG.ANT-struggle.free-ANT INT 3SG.ANT-do-ANT?
'He tried to struggle free but in vain.' (lit. 'but for what?')

(46) *Iwaidja* (Iwaidja Dictionary)
maju an-irrka-nyi, lda a-wardunyma-n
WANT 2sg.PCF-spear-PCF CONJ 3sg.ANT-miss-ANT
'You tried to spear [it], but you missed.'

The above avertive utterances seem to denote actual but failed attempts, with an underlying modal content—they imply a prospective (predictive or teleological modal base) or volitional (bouletic modal base) modal meaning. As this meaning is secondary, I will argue that it should be treated as an instance of multi-dimensional meaning *qua* a conventionalized implicature à la Potts (2007)—note that such utterances also involve expressive content, as they routinely take on mirative-negative flavors (i.e., often convey regrets, unpleasant

38. As suggested above, some of the PC-like structures discussed in section §3.1 probably also qualify as periphrastic avertives (see particles *puru* and *putu* in (35) and (36); ~~as~~ they seem to be endowed with a clear modal meaning).

surprises, etc.). Alternatively, one could treat the associated avertive particles as endowed with some sort of modal content, whether bouletic, predictive/teleological, or capacitative. I will leave this as an open question for future research.

Last but not least, it is worthwhile noting that dynamic atelic verbs can give rise to avertive readings when involved in similar overtly avertive patterns, but then get inchoatively reinterpreted—as does any atelic dynamic verb combining with 'try' in English, cf. (47)—so far, however, only stative verbs capable of involving some form of subject control (e.g. posture verbs) seem to be eligible for such constructions, which suggests an aspectual, dynamic event type selectional requirement (though not causativity *per se*):

(47) *Iwaidja* (Author's fieldwork)

| | | | |
|---|---|---|---|
| anamalamanma | ba mudika | ba | arlarrarr |
| 1SG>3SG.PCF-drive-PCF | the car | CONJ | nothing |

'I tried to drive the car but I couldn't.'

As I have already signaled above, datapoints such as ~~(43)~~ are strangely reminiscent of PC utterances like (25)/(26)/(27), both syntactically and semantically. And while they also differ in an important respect, namely that *bona fide* PCs do not have a very clear modal meaning, PCs involving reduplication—including full verb reduplication as in (48)—and/or the 'durative event' intonation (::) (27) seem to possess either a proximative or a teleological interpretation, i.e. arguably involve some kind of modal content (somewhat like many inflectional progressives or imperfectives).

(48) *Iwaidja* (Author's fieldwork)

| | | | |
|---|---|---|---|
| ari-ngan | ari-ngan | ari-ngan, | arlarrarr |
| 3SG.ANT-stand-ANT | 3SG.ANT-stand-ANT | 3sg.ANT-stand-ANT | nothing |

'He waited there for a long time, for nothing.' [= subject referent tried to get something by waiting for a long time – but he didn't achieve the result he had in mind]

Therefore, I will regard PCs in Australian languages as a type of *avertive strategy*—again in line with independent proposals made about Salish (Davis & Matthewson 2016) and Uto-Aztecan PCs (Copley & Harley 2014). While Kroeger (2017) has argued against the possibility of treating PCs and avertives as functionally overlapping structures in a Papuan language (Kimaragang), I believe I have offered above compelling arguments demonstrating extensive semantic convergences between the two types of structures in Australian languages, as they involve similar syntactic patterns/rhetorical routines—with modal meaning being the real factor at play here in differentiating them (or not so clearly differentiating them, as in e.g., (48)).

## 4. Conclusion

It is high time I concluded this long discussion of culmination construal in Australian languages. I hope to have established that not only do Australian languages consistently have telicity and causality-deficient verbal stems, especially intransitive stems with so-called inchoative morphology marking, they also present recurrent deficiencies at the verb/inflection interaction level. 'Partitive culmination' (PC) utterances involving a verb in a past indicative clause plus a negative particle, were argued to be run-of-the-mill utterances in Australian languages, and to involve another type of culmination-related deficiency (so-called 'weak' perfectivity, and/or special biclausal negative constructions with an avertive flavor). To account for the latter phenomenon, I have invoked the analytical concept of *aspectual deficiency as structural impoverishment* (or ADSI), proposed in (Nash 2017) for the Georgian aorist tense, suggesting that it was probably at play as well in some Australian languages with 'zero' inflectional paradigms; I have also claimed that various types of aspectual underspecification constituted a somehow related type of aspectual deficiency (though not as a structural absence). And indeed, taken more broadly, it seems to me that aspectual deficiency is a very Australian trait, both with respect to the semantics of inflections, but also with respect to the verbal lexicon, as the very encoding of telicity and event delimitation in Australian verb stems can be left unspecified. Australian languages thus appear to offer symptoms of a phylum with an aggravated, often multi-domain case of aspectual deficiency.

I would like emphasize that whether or not the said deficiency is a structural absence or a matter of semantic underspecification, does not matter as much as the following empirical generalization: culmination construal is often not a 'simple clause'-level sort of phenomenon and generally involves multi-predicative, and even multi-clausal structures. Not only do Australian languages often fail to differentiate change-of-state vs. non-change-of-state configurations with their intransitive verbs—and possess a range of markers partially making up for this, such as causo-temporal particles and clitics, cf. Panyjima *=rru* (7)-(10)—but even their transitive verbs overtly marked for a subject-controlled, externally caused change-of-state, are not enough to warrant a culminating interpretation when combined with a so-called past perfective tense (effectively an often heavily underspecified inflection

for temporal and/or aspectual parameters).[39] Compounded with the abundance of avertive structures in Australian languages, and their formal and semantic overlap with PC utterances, this tells us in no ambiguous way that even externally causing subjects hold only relative control over how successful their actions are in Australian languages: not only is telicity less clearly encoded, but (external) causation and telicity seem structurally de-coupled in many Australian languages. Or at least much more so than is crosslinguistically the case in some other languages known to exhibit PCs (and mostly or only accomplishment-based PCs), cf. e.g. Demirdache & Martin (2015). Martin (2019) and Beavers & Lee (2020). Or because PCs and avertives are formally much less similar (and much less frequent) in those languages. I believe PC/avertive/frustrative patterns found in Australian militate in favor of giving (subject) control *qua* a semantic notion a greater role than actual causativity in the phylum (see e.g. the discussion of (47) and (48)). Although event control is also an important parameter for PCs in at least some families of Indigenous languages spoken in the Americas (Bar-el 2005; Bar-el, Davis & Matthewson 2006; Jacobs 2011), it appears to be so by virtue of its being an important semantic ingredient of causative structures.

As a result of this weaker link between causation and telicity, Demirdache & Martin's 'Agent Control Hypothesis' can be argued to hold comparatively less sway in Australian languages—again, I believe it to be connected with the wider distribution of PCs with Aktionsart/actional types in Australia than in numerous other PC-endowed languages (they typically do not extent to non-agentive, non-externally-caused event predicate types in e.g. Salish languages, Korean, where PCs require active voice and seem to be restricted to change-of-state/causative predicates (Beavers & Lee 2020) and in particular non-culmination readings in which the result state inherent to the meaning of the predicate fails to obtain or to remain valid, such as Romance, etc.—see the (28)/(29) contrast above).

I have hypothesized that 'rhetorical routines' à la Ulrich Detges & Richard Waltereit (2002) could compensate for the aspectually deficient-lexicon and grammar of Australian languages, claiming

39. It should be stressed again that in many Australian languages, no clear perfective/imperfective distinction holds, and that either monosemous imperfective and/or perfective can be lacking. See e.g. Anindilyakwa, Jaminjung and Murrinh-Patha, for which reduplication or periphrastic structures are required to convey perfective/imperfective-like distinctions (Schultze-Berndt 2010; Nordlinger & Caudal 2012; Bednall 2019).

that they played (and are still playing) a part in the development of entrenched constructions involving negative particles/clitics to express an event's failure to culminate—or its culmination (see e.g. (39)). It seems that because of a morphosyntactic 'weak' encoding of culminations in single-verb structures, Australian languages have developed appropriate means to specify them at the inter-clausal level, or in multi-event constructions. This also explains the important role played by other inter-sentential categories for similar reasons, such as the pan-Australian use of 'now, then'-type clitics and particles (cf. the discussion of the *=rru* clitic at the end of §2.2), or so-called 'linear lengthening intonation' (Mailhammer & Caudal 2019)—another apparent areal feature of Australian languages—to convey event-delineation and event ordering in discourse. Such devices interact with avertive and PC structures in significant ways to compensate for the extreme flexibility and underdetermination of culmination/change-of-state information in the interaction between a verb's Aktionsart information, and its TAM inflection. And of course, this is also in line with the syntactic prevalence of multi-verb expressions—i.e., clause chaining, so-called 'adjunct relative clauses' (Hale 1976; Nordlinger 2006), serial verb constructions and other complex predicate structures—well-known from syntactic descriptions of Australian languages; not to mention the abundance of highly semantically loaded particles in these languages (such as the avertive particles studied above in §3.1and §3.2). The key role some of these syntactic elements seem to play in the morphologisation cycles of verbal inflections, cf. Schultze-Berndt (2003) and Osgarby (2018) is also quite revealing of their being closely connected with grammatical aspectual parameters in Australian languages.

(49) *Iwaidja* (Author's fieldwork)
aringan rahardalkbik-bi-ny::
3SG.ANT-stand-ANT 3M>3SG.O.ANT-RED-jump-ANT
'He stood there jumping (repeatedly).'

arahardalkbik-bi-ny aringan::
3M>3SG.O.ANT-RED-jump-ANT 3SG.ANT-stand-ANT
'He stood there jumping (repeatedly).'

bartuwa. riwularrung
that's.it/then 3M>3SG.O.ANT-finish-ANT
'That was it. It finished.'

The grammar of event structure/delimitation in Australian languages is striking in how nimble it is at articulating what we could refer to as complex event structures, where changes-of-state/

culminations tend to be fully construed at a higher, multi-clausal, or at least multi-predicative level—and possibly at the discursive level, as in e.g., (41). It seems that the legitimate event structural atom for such languages is at once much 'light weight' than in languages with Aktionsart-parameters rich lexica, such as in e.g., SAE (including Slavic), and that 'simple' event descriptions are comparatively rarer in Australia. I believe it to be a predictable, system-wide effect of the aggravated, lexical and grammatical case of aspectual deficiency exhibited at the single-verb, simple event description level by many Australian languages. And as shown above in the analysis of (39), the need to specify telicity beyond a simple event predicate level extends to both failed and successful culminations. Australian languages offer extremely varied syntactic markers (including serial verb systems, particles and clitics, discourse connectives—cf. e.g. Iwaidja *bartuwa* 'and now, and then' and *riwularrung* '(it) finished/that's it' in (49), or the well-known temporal ordering strategies via presuppositional clitics such as *=rru* in Panyjima and many other Australian languages (Ritz, Dench & Caudal 2012; Ritz & Schultze-Berndt 2015) cf. (7)-(12), etc.) capable of saturating aspectual information and constituting complex event descriptions at a higher level,

Of course, there is still much to write about the grammar of event structure in Australian languages, but I must leave it to future work—including formal theoretical considerations. My intent was merely to offer Léa Nash a glimpse of what I hope is a tantalizing empirical domain, where to witness aspectual deficiency (either as plain ADSI or as some kind of aspectual underspecification) operating in 'full swing mode,' so to speak. I hope you will enjoy it, Léa! Happy birthday, and many happy returns of the day!