## On apprehensives as bi-propositionals conditionals: an Australianist perspective

So-called *apprehensive* (or *apprehensional*, or *timitive*) grams have been identified in numerous Indigenous languages of Australia cf. (Laughren 1982, Eather 1990, Evans 1995, Angelo & Schultze-Berndt 2016), and of the Americas (Vuillermet 2018, AnderBois & Dąbkowski 2020). Capitalizing on this rich scientific context, the present talk aims at furthering our understanding of apprehensives, through (i) a sample-based typological overview, (ii) recent dedicated fieldwork on Iwaidja and (iii) by proposing a formal of apprehensive structures in Australian languages as bi-propositional conditionals – mostly negative conditionals, but also run-of-the-mill positive conditionals.

A comparative study conducted on a balanced sample of 26 Australian languages revealed some unknown (or understudied) variations in the morphosyntax and semantics of Australian apprehensives, whether as synthetic inflections (FUTIRR in Murrinh-Patha, (6)) or as periphrastic inflections (angkad + V<sub>OPT/PR</sub> in Iwaidja, marnti/marndi + V<sub>PR</sub> in Mawng and Bininj Gun-wok, ngaja + V<sub>POT</sub> in Bilinarra, etc.). This paper focuses on apprehensive structures marked by verbal inflections. The most common type are bi-clausal structures, especially P-imperative+O-predictive ('you (must) P, or else will Q') (1), and P-prohibitive+Q-predictive ('don't P, or else will Q') – it corresponds to a special type of so-called 'precautioning avertives' in the literature. A novel key finding was that biclausal apprehensive structures can have symmetric marking, with P and O bearing the same apprehensive inflection. A third major biclausal structure type, P-hypothetical+Q-Predictive, was identified ('if P, then will Q'); its connection to priority modality is pragmatic at best (Portner 2018). A fourth major biclausal type involves complement clauses of 'be frightened that P' constructions (3). In addition to biclausal types, mono-clausal apprehensive structures were also found to be common. Most express an open undesirable possibility (4) (which is an elliptic form of the Pdirective, *Q-predictive* biclausal structure (1)) or a foreclosed, counterfactual undesirable possibility, sometimes with admonitive flavor, (5) (which is an elliptic form of the hypothetical type (2)). Unexpectedly, in languages with a symmetric marking of biclausal apprehensives, we uncovered monoclausal *negative directive* apprehensive clauses (positive forms are ruled out in said languages). They entail an 'or else will Q' implicit consequent (e.g., an implicit threat, (6), cf. (Green 1995: 315)). Last but not least, some languages in the sample (e.g., Worrorra) lack bona fide apprehensive verbal inflections; apprehensive meaning then stems from nominal marking (Gooniyandi) - or from pragmatic enrichment. The latter 'apprehensive strategies' (7), contextually construed from a general irrealis inflection, can coexist with dedicated apprehensive morphology.

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ngartung mana angkad birta
    kudn-uka-Ø
                                                                  nganba-va-njing
                                                                                       (Iwaidja)
    1sg>2pl.RMOD-peep-RMOD OBL.1SG. maybe APPR
                                                     otherwise
                                                                  3pl>1sg.OPT-see-OPT
    'Keep a lookout for me, otherwise they might see me.'
                                                                                       (Iwaidja Dictionary)
(2) ninda
              naygu bulgugu
                                   wadilŋaŋu
                                                       nada ninuna mana
                                                                                 gunbalbila
                                                                                             (Dyirbal)
    you-SA I-GEN
                      wife-DAT
                                   swive-DAY-REL-NOM I-SA you-O ear-NOM
                                                                                 cut-APPR
    'If you swive my wife, I'll cut off your ears.'
                                                                                 (Dixon 1972: 362)
                                   garra,
                                                                                              (Bilinarra)
(3) wuugarra=rnayinangulu
                                               ngaja=ngandibangulu
                                                                                 bava-wu
    frightened=1AUG.EXC.S>3AUG.O be.PR
                                               APPR=3AUG.S>1AUG.EXC.O
                                                                                 bite-POT
    'We're frightened of them (because) they might bite us (referring to dogs).'
                                                                           (Meakins & Nordlinger 2013: 241)
                                        kurruni-wu-n.
(4) k-ini-majpungku-n,
                             marnti
                                                                                 (Mawng)
    PR-3MA/3MA-lift.up-NP
                             APPR
                                        3MA/2PL-kill-NP
    'The sea is rough and it might kill you.'
                                               (>Implicit order: 'stay ashore/don't canoe') (Singer 2006: 171)
(5) (we built a huge fire ...)
                                                                                 (Nakarra)
                            korla minja
                                               namunja ya-bburba-ma
                             APPR flies
                                               3>3.IRR+follow.food-PCT
                                                                                 (Eather 1990: 347)
    'We built a huge fire, otherwise the flies would have hung around'
              na-ngi-mathputh-nukun=thurru
                                                                                       (Murrinh-Patha)
              2sgs.hands(8).futirr-1sgo-interrupt-futirr=2sgs.go(6).futirr
                                                                                 (Nordlinger & Caudal 2012)
    'Don't you continually interrupt me.' (>Implicit threat: 'or I'll punish you')
(7) yama=lhangwa!
                      n-ak
                             nenəngkwarba
                                               kənə-wənyamba-dhu-Ø=ma
                                                                                 (Anindilyakwa)
    watch.out=ABL
                      3M-that 3M.man
                                               IRR.3M-angry-INCH-USP=MUT
    'Watch out! The man might become angry!' (No grammatical apprehensive marker) (Bednall 2020: 328)
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The above survey, plus special fieldwork conducted on Iwaidja confirmed that some important differences exist between common types of apprehensive structures in Australia, and in e.g. the

Americas – where such grams have been most extensively studied in the recent years cf. e.g. (Vuillermet 2018, AnderBois & Dąbkowski 2020). Although several formal treatments of apprehensives can be found in the literature (Phillips 2021, Tahar 2021, AnderBois & Dąbkowski 2020), we will base our first formal treatment on (Phillips 2021), as it was devised for (Australian) Kriol apprehensives (it is *de facto* closer to apprehensives structures found in Indigenous Australian languages) and is a crucially discourse structural account, – in contrast, discursive parameters are very much left aside in other formal analyses. According to Phillips (2021:66)'s DRT-style semantic analysis (8), Kriol apprehensive structures have a negative bi-propositional conditional meaning ('P, otherwise Q') (Starr 2020), with modal subordination (Roberts 2020) between a negated contextual sub-DRS  $K_i$ , whose content is a fraction of that of  $K_i$ . He further argues that the content of  $K_{isub}$  is pragmatically derived from the *Question-under-Discussion* (QuD) (see (Phillips 2021:69) for details).

(8)  $K_i \ominus K_j \Leftrightarrow (K_i) \land (\neg K_{isub} \lozenge K_j)$  ( $\ominus$  is the rhetorical function denoted by *bambai*)

Generalizing this analysis to the above data raises some non-trivial issues. Thus, (8) cannot apply to positive biclausal hypothetical apprehensives such (2), as it would make the consequent dependent on the *negation* of the antecedent; but (2) is a positive conditional ('if P, then Q') with P non-directive, not a negative conditional ('P or else Q') with P directive. Applying (8) to the mono-clausal, prohibitive type (6) would also be problematic;  $\neg K_{isub}$  boils down to the mere negation of the propositional content of  $K_i$  (i.e., the prohibitive antecedent), its content is not pragmatically inferred. What is inferred and contextually accommodated, is the (predictive) consequent ( $K_i$  in (8)). Phillips's analysis really cannot hold in (6). These problems suggest that we should assign different semantics, to different syntactic types of apprehensive structures. We will propose that we in fact need a theory resorting to SDRT-style *discourse relations* (Asher & Lascarides 2003), bearing on underspecified discourse referents (not mere sub-DRSs) in some types of apprehensive structures.

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