# Multi-CAST

# Vera'a annotation notes

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#### Citation for this document

Schnell, Stefan. 2019. Multi-CAST Vera'a annotation notes. In Haig, Geoffrey & Schnell, Stefan (eds.), *Multi-CAST: Multilingual corpus of annotated spoken texts.* (multicast.aspra.uni-bamberg.de/) (date accessed)

#### Citation for the Multi-CAST collection

Haig, Geoffrey & Schnell, Stefan (eds.). 2015. *Multi-CAST: Multilingual corpus of annotated spoken texts.* (multicast.aspra.uni-bamberg.de/) (date accessed)

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Multi-CAST Vera'a annotation notes v1.2 last updated 8 August 2019 This document was typeset by NNS with  $X_T LAT_T X$  and the multicast3 class (v3.2.0).

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#### 1 Introduction

This document outlines the morphosyntactic structure of Vera'a, and describes the implementation of GRAID glossing conventions as outlined in the *GRAID Manual 7.0* (Haig & Schnell 2014). It corresponds to version 1908 of the annotations, published in August 2019. Unless there is a more recent version of this document, it also applies to any later version of the annotations.

Section 2 gives an overview of Vera'a basic morphosyntactic features and the implementation of the core set of GRAID glosses. Section 3 deals with the treatment of other finite and non-finite types, and Section 4 with that of complex sentences. Morphological glosses and form paradigms are provided in Appendices A and C.

# 2 Basic structural features and GRAID glossing

Vera'a is an isolating language with grammatical affixes being confined to possessive pronominal suffixes on bound nouns. Exponents of some TAM (tense-aspect-mood) categories and the common NP article are enclitics and occur detached from their functional heads. Typically, phrases consist of at least two and often more words, e.g. TAM marker+verb or article+noun, and subconstituents are all glossed as such. In the following I outline the basic structure of the Vera'a language alongside their handling in GRAID annotations.

#### 2.1 Clause structure and syntactic functions

Vera'a has two basic clause types, verbal and non-verbal ones. These have different types of predicate expressions, a verb complex (VC henceforth) in verbal ones and some other type of phrase in non-verbal ones.

#### 2.1.1 Verbal clauses and syntactic functions

A verbal clause need not have any argument expression, and may consist of only the VC functioning as the predicate, as in (1):

```
(1) ne maran

TAM2:3sG daylight

## lv-pro_s v:pred

'(And then) it became daylight.'
```

[mc\_veraa\_isam\_0032]

As in (1), the VC receives the form gloss  $\langle :v \rangle$ , regardless of whether its head word itself is unambiguously classified as a 'verb'. Core argument functions S, A, and P (in the sense of Andrews 2007) are encoded by the position of the NP or pronoun relative to the VC. S and A arguments precede the VC, and P arguments occupy a post-verbal position, as in the following examples (2–4):

```
(2) rene ne wotoqtoqo
woman TAM2:3SG pregnant
## np.h:s lv-pro_h_s v:pred
'(And then) the woman got pregnant.'
```

[mc\_veraa\_pala\_0003]

kur

(3)

rōv-rōv'ē

```
RED-close.to 2sg
                             TAM2 gnaw
                                            break =ART stalk pawpaw DEM3
     ## other
                    pro.2:a lv
                                    v:pred rv
                                                   =1n
                                                         np:p rn
     "...would you almost have gnawed off the stalk of the pawpaw (fruit)?"
                                                                    [mc_veraa_gabg_0083]
(4)
        Mag'iē
                   anē
                                        vesir
                                                             'ama'
                            ne
                                                Sa
                                                       =n
        old.woman DEM1.A TAM2:3SG
                                                EMPH =ART devil
                                        ask
     ## np.h:a
                            lv-pro_h_a v:pred other =ln
     ē
           SO
     DEM3 QUOT
           other
     '(And then) the old woman asked the devil: ...'
                                                                   [mc_veraa_asmse_0068]
```

 $kir\bar{m}\bar{o} = n$ 

gako wova'al ē

Where the S or A function is expressed by a pronoun, it will occupy the same pre-VC slot where lexical S or A arguments occur, as in (5) and (6):

```
(5)
         dir
                                   diē
                   =m
                           vus
         3рт.
                  =TAM1 kill
                                   3s<sub>G</sub>
     ## pro.h:a =lv
                           v:pred pro.h:p
     'They killed him.'
                                                                         [mc_veraa_iswm_0208]
(6)
         duru
                   =k
                           kal
                                   ba'a kel
                                               sarē
         3DL
                  =там2 enter
                                   into back in
     ## pro.h:s =lv
                           v:pred rv
                                               other:1
     'Then the two went ashore again.'
                                                                         [mc_veraa_isam_0061]
```

Where the P function is expressed by a bare pronoun, this pronoun is incorporated into the VC, as in example (7) where third singular di precedes the directional adverb sar 'in(wards)':

```
(7)
         dir
                   =\bar{e}k
                            q\bar{e}r\bar{e}
                                    ba'a di
                                                    sar lē
                                    into 3sG
         3<sub>PL</sub>
                   =TAM2 push
                                                    in LOC = ART
     ## pro.h:a =lv
                                          pro.h:p rv adp =ln
                           v:pred rv
                                            nimē
                                     =n
                  -gi
     Poss.house -3sg
                                     =ART house
                  -rn_pro.h:poss =ln
                                           np:g
     'They pushed her into her house.'
                                                                            [mc_veraa_iswm_0171]
```

It seems that in some cases, bare pronouns may also follow the VC; in other – probably most – cases, this question is not decidable in particular contexts, as in (5) above.

Oblique arguments are encoded by means of prepositional flagging, and so are adjunct functions. Both occupy positions following the VC. Three types of oblique arguments are considered in the *GRAID Manual* (Haig & Schnell 2014: 13f.), that is those expressing locations  $\langle :1 \rangle$ , goals  $\langle :g \rangle$ , or some other semantic role  $\langle :ob1 \rangle$ , and all three are also distinguished in Vera'a. Examples (8) and (9) show location and goal roles:

```
(8)
        duru
                  ga
                        'ōg
                                wal
                                       sa
                                              lē
        3DL
                  STAT stay
                               exactly EMPH LOC =ART home-CS
     ## pro.h:s lv
                        v:pred rv
                                       other adp = ln
                                                         np:1
                                     Nōs
               Wowot
                              'a
     PERS.ART W.
                              LOC.SP N.
               rn_np.h:poss rn
                                     rn
     'The were living right up in Wowot's home village at Nos.'
                                                                      [mc_veraa_iswm_0004]
        dir
(9)
                                 kal
                                                             wōmōmō'
                  =m
                         van
                                           sar
                                                  lē
                                                       =n
        3рт.
                                 upwards inland LOC =ART bush
                  =TAM1 go
     ## pro.h:s =1v
                         v:pred rv
                                                  adp = ln
                                                             np:g
     'He went down to the reef...'
                                                                       [mc_veraa_jjq_0008]
```

In all three examples, the same basically locative preposition  $l\bar{e}$  is the head of the PP expressing either a location or a goal, with more specific semantic role interpretations relating to differences in verbal semantics and world knowledge. A dative preposition is used where location or goal are human participants. Examples of human locations did not occur in GRAID corpora so far, but would be glossed as done for the following elicited example in (10):

```
(10) ba =n gasel ga 'ōg'ōg mē-n e Janet
but =ART knife STAT red:stay DAT-CS PERS.ART J.
## other =ln np:s lv v:pred adp ln np.h:l

'The knife is with Janet.' (elicited)
```

Goal-like roles carried out by humans are recipients/beneficiaries and addressees, and are all glossed with  $\langle : g \rangle$ , as shown in (11–13):

```
(11)
                                          biēg
                                    =n
                                                     ne
               TAM2:3SG
                            transfer =ART breadfruit NUM.ART NUM-one
      ## 0.h:a lv-pro_h_a v:pred =ln
                                          np:p
                                  le
                                          тē
                                               di
                                                                  vō-wal
        wo
        and
               ZERO TAM2:3SG
                                  transfer DAT 3sG
                                                        NUM.ART NUM-one
      # other 0.h:a lv-pro_h_a v:pred adp pro.h:g ln
                                                                 np:p
      "... took a breadfruit and gave her one (as well)"
                                                                     [mc_veraa_mvb_0103]
(12)
         duru
                  =k
                         ..e.. sor
                                      тē
                                           duru
                                                          gogov
                                                    =n
         3DL
                  =TAM2 HES wear
                                      dat 3dl
                                                    =ART clothes
      ## pro.h:a =lv
                              v:pred adp pro.h:g =ln
                         nc
                                                          np:p
      'The two put their clothes on.'
                                                                     [mc_veraa_anc_0026]
(13)
         Tumeren
                                 tēk
                                        mē dirē
                    ne
         T.
                    TAM2:3SG
                                say
                                        DAT 3PL
      ## np.a:s_ds lv-pro_h_s v:pred adp pro.h:g
      'Then Tumeren said to them, ...'
                                                                     [mc_veraa_jjq_0318]
```

In three-participant constructions, word order may vary slightly, according to considerations of referentiality and animacy features of arguments (cf. Schnell 2012a), demonstrated by (11) and (12). Hence, NPs with P function may actually occur following a dative (or ablative for that

matter) PP; thus, P NPs are those that are not flagged by a preposition and occur in some post-VC position. The roles of recipients or beneficiaries may also be expressed by possessive morphology, which is glossed (:poss) for possessor, as the specific reading as either possessor or recipient/beneficiary is a matter of inference rather than encoding.

In accordance with the *GRAID Manual* (Haig & Schnell 2014), no sharp distinction is made between arguments and adjuncts. Thus, locative PPs as in (14) would also be receiving the  $\langle :1 \rangle$  function gloss. The same holds for arguments/adjuncts expressing a goal  $\langle :g \rangle$  or some other semantic role  $\langle :ob1 \rangle$ .

```
(14) kamam mi'ir lē =n qan̄ris

1PL.EX:TAM1 sleep LOC =ART oven

## pro.1:s v:pred adp =ln np:l

'We slept in the stone oven.' [mc_veraa_jjq_0310]
```

Other oblique arguments express a variety of semantic roles. In some instances, the choice of a particular preposition unambiguously encodes a particular semantic role, for instance source being expressed by an ablative preposition in (15), while in other instances verb semantics and context reading appear to play an important part, as in (16), where the instrument reading is not encoded as such by the locative preposition:

```
(15)
                man kalu
                             den ēn
                             ABL ART bamboo
         ZERO PFV exit
      ## 0.h:s lv
                     v:pred adp ln
                                      np:obl
        dir
                 man 'ēgēl
                 PFV descend
        3pt.
      # pro.h:s lv
                      v:pred
      '(They) had already come out of the bamboo, they had already come down.'
                                                                      [mc_veraa_jjq_0346]
(16)
         ba
                di
                                     'i
                                         lē
                       ga
                            mana
                                              =n
                                                    raw
                                                                      wuva
                3sg
                       STAT magical DEL LOC =ART hermaphrodite.pig only
         but
      ## other pro:s lv
                            v:pred rv
                                        adp =ln
                                                                      other
      'But it [i.e. some water] is magic only through a hermaphrodite pig.'
                                                                      [mc_veraa_as1_0102]
```

The glossing of oblique PP arguments as either  $\langle :1 \rangle$ ,  $\langle :g \rangle$ , or  $\langle :ob1 \rangle$  follows semantic role considerations rather than formal ones. Thus, the locative PP in (16) is glossed as bearing  $\langle :ob1 \rangle$  rather than  $\langle :1 \rangle$  or  $\langle :g \rangle$  function because it expresses the semantic role of an instrument.

Clear instances of circumstantial adjuncts are glossed for their form and receive the function gloss (:other). This is typically the case with temporal PP or NP adjuncts, as in (17):

```
(17) no = m \quad van \quad ma \quad l\bar{e} = n \quad q\bar{o}\bar{n}

1sG = TAM1 \quad go \quad hither \quad LOC = ART \quad night

## pro.1:s =lv v:pred rv adp =ln np:other

'...I came here last night, (but then where were you guys?' [mc_veraa_jjq_0393]
```

For clause-level adverbs and other types of one-word modifiers the gloss *(other)* is used, not further classifying form and function distinctly.

#### 2.1.2 Non-verbal clauses and syntactic functions

The predicate of a non-verbal clause is a phrase of various types, but not a VC. These phrases are glossed for their form like arguments and take the function gloss (:pred):

```
(18)
               kaka
                         agēnē di
                                             kaka
                                                       nelēo vu'
          n
          ART story
                        DEM2 3sg
                                       =ART story
                                                       voice spirit
      ## ln
               np:dt_s rn
                               pro:s =ln
                                             np:pred rn
      'This story here, it is a customary story [lit. a spirit's voice].'
                                                                          [mc_veraa_mvb_0009]
(19)
          ba
                 kumru
                           'n,
                                       wōvinga
                                =n
          but
                 2DL
                          with =ART coconut.shell
      ## other pro.2:s adp =ln
                                      np:pred
      'But do you have a coconut shell with you?'
                                                                          [mc_veraa_as1_0083]
```

Thus, it is a NP in (18) and a PP in (19) that bear predicate function in the respective non-verbal clauses. As shown in these two examples, the subject expression in a non-verbal clause is considered to have S function, glossed  $\langle : s \rangle$ . As with verbal clauses, non-verbal clauses may not contain a subject relation at all, as in following examples (20) and (21):

```
(20)
                              vō-wal
                                        'erē 'añsar
          qōn
                                                               Lēmērig
         day
                    NUM.ART NUM-one PL
                                           person
                                                       LOC.SP L.
      ## np:other rn
                                          np:predex rn
                                       ln
                             rn
                                                               rn_np
      'Once upon a time, (there were) the people of Lemerig.'
                                                                      [mc_veraa_isam_0002]
(21)
          =n
                lañ
                     vus m
                               vus
                                       kamam
                                                         =n
                                                               mar
         =ART wind hit real hit
                                       1PL.EX
                                                  CC
                                                         =ART famine
               np:a rn lv v:pred pro.1:p # other =ln
                                                               np:predex
      '... [when] a hurricane hits us and (when) (there is) famine.'
                                                                      [mc_veraa_panr_0010]
```

Such clauses are existential clauses, that is they express that an entity or state of affairs exists or has come into being. The predicates of these clauses receive the function gloss (:predex) for 'existential predicate'.

There are a number of other elements, neither NPs nor PPs, that may function as predicate. All of these are glossed as  $\langle other:pred \rangle$  or  $\langle other:predex \rangle$ . Examples are the quotative particle so that accommodates direct speech in the matrix clause, as in (22), a bare numeral, as in (23), or the existential  $b\bar{e}ne$  'there is', as in (24):

```
(22) e D\bar{o}l so # o no man q\bar{e}' PERS.ART D. QUOT # no 1sG PFV finish ## ln np.h:s other:pred #ds other pro.1:s lv v:pred 'D\bar{o}l said: 'No, I am done. [The kava has already made me drunk.]'
```

```
(23)
                            'i-'isi-gi
                                                              wal dēmē
                    raga
                                                 sañwul
         PERS.ART people NSG-same.sex.sibl-3sg ten
                                                              one
      ## ln
                           np.h:s
                                                 other:pred rn rn
                    1n
                vō-ruō
      ne.
      NUM.ART NUM-two
                rn
      'His brothers were twelve.' [i.e. 'He had twelve brothers.']
                                                                        [mc_veraa_jjq_0003]
                                                  du
(24)
                      wova'al bēne
                                                            =k
               =n
                                                                    gen
        if
               =ART pawpaw exist
                                                            =TAM2 eat
                                                                            0_them
                                                  IN
      # other =ln
                     np:s
                               other:predex ## wpro.1:a =lv
                                                                    v:pred 0:p
      "... (and) if there are pawpaw fruits we will eat (them)."
                                                                       [mc_veraa_gabg_0043]
```

Where existence is expressed by  $b\bar{e}ne$  (or likewise non-existence/absence by its negative counterpart gitag), it receives the function gloss  $\langle : predex \rangle$ , and the NP denoting the entity that is said to exist is considered an S argument. Where these existential particles occur with a locative oblique argument, the clause may have locational or existential semantics. In either case, it is glossed as in the examples in (25) and (26):

```
(25)
              dir
                        ne gitag
                                      lē
                                                  bo-re
                                           =n
              3<sub>PL</sub>
                        not.exist
                                      LOC =ART POSS.bed-3PL
      ##neg pro.h:s other:pred adp =ln
      'They are not in their beds.'
                                                                              [mc_veraa_jjq_0338]
(26)
                goro-giluwo bēne suwei
          ART hole-3sG
                             big
                                   exist
      ## ln
               np:s
                                   other:predex
      'It had a big hole at the bottom.' [lit. 'A big hole of it existed at the bottom.']
                                                                             [mc_veraa_iswm_0175]
```

#### 2.1.3 Other syntactic functions

Dislocated expressions receive the function gloss (:dt) 'dislocated topic', irrespective of whether the pragmatic function of its referent is actually considered a 'topic' in the narrow sense. No distinction is made between left- and right-dislocated expressions. Dislocated expressions can have lexical or pronominal form. Examples:

```
(27)
          n
                nuō
                            di
                                       =m
                                               lanlan
                                                          ēп
                                                               bini
                                                                           -gi
                            3sg
          ART turtle
                                      =TAM1 RED:SLAP ART hand/arm -3sG
               np.d:dt_a pro.d:a =lv
                                                               np:p
                                                                           -rn_pro.d:poss
                                               v:pred
      'And when Turtle had clapped his hands, ...'
                                                                             [mc_veraa_gaqg_0084]
(28)
          no
                        no
                                                 'irwur
                                  me sag
                                                 behind
          1s<sub>G</sub>
                        1s<sub>G</sub>
                                  FUT sit
      ## pro.1:dt_s pro.1:s lv v:pred rv
      '[You two sit first,] and I, I will sit last one in the back (of the canoe).'
```

[mc\_veraa\_pala\_0090]

Where applicable, information on clause-internal function a dislocated phrase correlates with is added to the  $\langle : dt \rangle$  function gloss, for instance  $\langle : dt_a \rangle$  and  $\langle : dt_s \rangle$  in (27) and (28). I assume here that a left-dislocated expression may correlate with an object function that receives zero expression within the clause, glossing it  $\langle : dt_p \rangle$  and the clause-internal object as  $\langle 0 : p \rangle$ . These are entirely analogous to instances where the object function is expressed by a pronoun:

```
(29)
          lavet
                   vō-wal
                              anē.
                                      dir
                                                =\bar{e}m
                                                        gis
          feast
                   NUM-one DEM1.A 3PL
                                                =там1 hold
      ## np:dt_p rn
                                      pro.h:a =lv
                                                        v:pred
                              rn
      'This feast, they held (it).'
                                                                         [mc_veraa_pala_0022]
(30)
                    ruwa
                                re-reñe
                                             an\bar{e}
                                                     duru
                                                               =m
          PERS.ART two.people NSG-woman DEM1.A 3DL
                                                               =TAM1
      ## ln
                                np.h:dt_p rn
                                                     pro.h:a =lv
                    ln
               'n,
                    duruō
      da
      dο
              with 3DL
                    pro.h:p
      v:pred rv
      'The two girls, they [i.e. their parents] looked after them.'
                                                                         [mc_veraa_pala_0009]
```

A further type of function distinguished for Vera'a is that of appositional expressions. These are typically co-referential with the one they are juxtaposed with and provide additional information on said referent. They receive the function gloss (: appos), as in (31). Treated in the same way here are so-called 'inclusory constructions' where the juxtaposed expression is a non-singular pronoun that is partially co-referential with the expression it is juxtaposed with, as in (32).

```
... di
(31)
                                                   'aman 'a
          3sg
                   =TAM1 transfer =ART small
                                                   man
                                                          HES
      ## pro.h:a =lv
                           v:pred =ln
                                          np.h:p rn
                                                          nc
      'isimēre
                   anē
      second.born DEM1.A
      np.h:appos rn
      '(When) she gave birth to the boy, the second born, ...'
                                                                         [mc_veraa_mcbw_0020]
                    Qo'
(32)
                             dirē
                                           man 'ēqēl
          PERS.ART Q.
                            3<sub>PL</sub>
                                                descend
                    np.h:s pro.h:appos lv
                                                v:pred
      'Qo' and those with him had already hopped off.'
                                                                          [mc_veraa_jjq_0347]
```

Appositional expressions are distinguished form coordinated phrases and other complex argument expressions, as outlined in Section 2.2 below.

The only NP-internal function noted in GRAID glossing of Vera'a texts is that of possessors, glossed (:poss). All other NP-internal expressions do not receive a function gloss. Also, possessors are glossed only where they have a specific referent, excluding certain cases of compounding and modification.

# 2.2 Form of referential expressions

Vera'a has the following basic types of referential expressions:

expression	gloss	alt. gloss
common NP	⟨np⟩	
personal NP	⟨np⟩	⟨pro⟩
locative NP	⟨np⟩	
numeral phrase	⟨np⟩	
pronominal expression	⟨pro⟩	
free pronoun	⟨pro⟩	<pre>⟨wpro⟩</pre>
bound person marker	⟨-pro⟩	
adverb, demonstrative	⟨other⟩	⟨pro⟩

**Table 1** Form type–gloss correspondences of referential expressions in Vera'a.

- common NPs,
- personal NPs,
- ♦ locative NPs,
- numeral phrases,
- pronominal NPs,
- free pronouns,
- bound person markers, and
- adverbs.

Table 1 summarizes the glossing practices for each of these form types.

Common, personal, locative NPs and numeral phrases are all glossed  $\langle np \rangle$ . Vera'a also has pronominal NPs which are multi-word expressions consisting of a free pronoun plus further modifiers, and these are glossed as pronouns,  $\langle pro \rangle$ . For free pronouns, a distinction between default and weak forms is occasionally (but at present not consistently) made. Under bound person markers, we mainly summarize possessive suffixes. An additional bound person marker is assumed to be contained in one TAM allomorph, namely ne which is a portmanteau morph for both the TAM2 category as well as third person singular of the S or A (i.e. subject) argument. The gloss  $\langle other \rangle$  is used for all other types of referential or non-referential expressions. The following subsections provide a brief outline of each form type.

#### 2.2.1 Common NPs

Common NPs are introduced by the common article =n which may be omitted in clause initial position. Examples can be found in (29–32) above, and elsewhere in this document. They are glossed as  $\langle np \rangle$ .

#### 2.2.2 Personal NPs

Personal NPs are introduced by the personal article e and most typically have personal names or one of a small class of other personal nouns as their heads, as in the following examples in (33) and (34):

```
(34)
              'ama'
                      man kur
                                   sa
                                          е
                                                    ruwa
         ART devil
                      PFV devour EMPH PERS.ART two.people
      ## ln
              np.d:a lv
                           v:pred other ln
                                                    1n
      ni-ni'i
               -duō
                                ē
      red-child -1DL.IN
                               DEM3
      np.h:p -rn_pro.1:poss rn
      'The devil has already devoured our (DL) two children.'
                                                                    [mc_veraa_pala_0226]
```

In some instances, a personal pronoun takes a personal article and thus forms a personal NP. It will nonetheless be glossed  $\langle pro \rangle$  rather than  $\langle np \rangle$ :

```
(35) e no 'ōw'ōw

PERS.ART 1SG before

## 1n pro.1:s other:pred

'I am first (to jump).' [mc_veraa_anv_0063]
```

#### 2.2.3 Locative NPs

Locative NPs differ from other NPs in that they are not introduced by an article. They are headed by a local noun, for example a place name, and commonly function as the complement of the specific locative preposition a. Locative NPs are simply glossed  $\langle np \rangle$  in GRAID annotations. Two examples:

```
(36)
          sul
                   di
                                                  lo
                             ga
                                   'ōg
          folk
                                           LOC.SP seaside
                   3sg
                             STAT stay
      ## np.h:dt pro.h:s lv
                                  v:pred adp
      'The people who lived down at the sea, ...'
                                                                        [mc_veraa_bsvh_0006]
(37)
          ba
                 duru
                                 'ōg
                                                Lēmērig
                          ga
                                        а
          but
                 3DL
                          STAT stay
                                        LOC.SP Lemerig
      ## other pro.h:s lv
                                v:pred adp
      'The two lived at Lēmērig.'
                                                                         [mc_veraa_as1_0003]
```

#### 2.2.4 Numeral phrases

Numeral phrases are optionally introduced by the numeral article ne and headed by a numeral word which consists of a fossilized numeral prefix and a numeral root. Where numeral phrases function as arguments on clause level, they are glossed as NPs, as in (38):

```
(38) ne vō-wal ne van ma

NUM.ART NUM-one TAM2:3sG go hither

## ln np.h:s lv-pro_h_s v:pred rv

'(Then) one (of them) came over.' [mc_veraa_mcbw_0111]
```

Where they function as modifiers in a NP, they are glossed as sub-constituents, both numeral article and numeral word receiving (rn), as in example (20) above.

person	singular	dual	trial/paucal	plural
1 <sup>st</sup> incl.	_	(gi)du(ō)	(gi)dō'ōl	(gi)dē
1 <sup>st</sup> excl. 2 <sup>nd</sup>	no nik(ē)	ka(ma)du(ō) kumru(ō)	ka(ma)m'ōl kimi'ōl	ka(ma)m kimi
3 <sup>rd</sup>	$di(\bar{e})$	$duru(\bar{o})$	dir'ōl	$dir(\bar{e})$

**Table 2** Vera'a free personal pronouns.

#### 2.2.5 Pronominal expressions

As for person markers, four types are distinguished here for Vera'a. All of these are glossed as  $\langle pro \rangle$ , despite their structural differences. Free pronouns function as subjects, objects, and complements of prepositions:

```
(39)
          dir
                    =m
                            VUS
                                     diē
          3рт.
                    =TAM1 kill
                                     3s<sub>G</sub>
                            v:pred pro.h:p
      ## pro.h:a =lv
      'They killed him.'
                                                                           [mc_veraa_iswm_0208]
(40)
                    mak 'aram enteg mē nikē
          1s<sub>G</sub>
                    ıмм tell
                                  well
                                        DAT 2SG
      ## pro.1:s lv v:pred rv
                                         adp pro.2:g
      "... and I will make it clear to you immediately."
                                                                           [mc_veraa_gabg_0025]
```

The paradigm of free pronouns is given in Table 2. Initial investigation of subject pronouns (Schnell 2010; 2011; 2012c; b) suggests that these pronouns are grammaticalizing into subject indexes, showing tendencies for a tighter morphological integration with subsequent TAM markers. This involves occasional reduction in form of first person non-singular pronouns through deletion of the first or second syllable, see Table 2; the reduced form is considered weak here and glossed – though not entirely consistently at this stage – with <code>(wpro)</code>. Thus, the following two glossing practices can both be found in the current Vera'a Multi-CAST corpus:

```
(41)
         du
                    =k
                                   qē'
                                                      mak mulō
                           gen
                                             gēdu
         1DL.IN
                   =TAM2 eat
                                   finish
                                             1DL.IN
      ## wpro.1:s =lv
                          v:pred rv
                                         ## pro.1:s lv
                                                           v:pred
         pro.1:s
      "... we will eat, then we go home."
                                                                 [mc_veraa_gabg_0043-0044]
```

Where final vowel deletion occurs with pronouns, the forms are not counted as weak. Note that subject pronouns are essentially treated as free pronouns here. Their possibly intensifying closer integration with the VC is taken as a research question to be tackled through analysis of GRAID-annotated texts rather than a fact that feeds into the annotation.

Free pronouns may take further modifiers in Vera'a, and thus form a complex expression which is termed pronominal NP here and glossed  $\langle pro \rangle$ . Note that modifiers of such pronominal heads are glossed  $\langle rn \rangle$ :

```
(42) kamam'ōl birin ēn vēvē -maduō 'ōg-'ōgo
1TL.EX with ART mother -1DL.EX RED-stay
## pro.1:s rn rn rn_np.h -rn_pro.1:poss v:pred

'We two, together with our (two) mother, will stay behind.' [mc_veraa_mvbw_0127]
```

"... took their canoe ..."

[mc\_veraa\_hhak\_0071]

person	singular	dual	trial/paucal	plural
1 <sup>st</sup> incl.	_	$-du(\bar{o})$	-dō'ōl	-dē
1 <sup>st</sup> excl.	-k	- $madu(\bar{o})$	-mam'ōl	-mam
2 <sup>nd</sup>	-m	$-mru(ar{o})$	-mi'ōl	-mi
3 <sup>rd</sup>	-gi	$-ru(\bar{o})$	-r'ōl	$-rar{e}$

**Table 3** Possessive (pronominal) suffixes in Vera'a.

```
(43)
                 kamadu anē
          'ei
                                                              nik
                                                                       anē
                                   =m
                                          van
                                                   ma
                                                         sir
          INTERJ 1DL.EX DEM1.A = TAM1 go
                                                  hither for
                                                              2sg
                                                                       DEM<sub>1.A</sub>
      ## other pro.1:s rn
                                  =1v
                                          v:pred rv
                                                         adp pro.2:g rn
      'We two have come just for you.'
                                                                      [mc_veraa_pala_0061]
```

Possessive suffixes are glossed as bound person markers,  $\langle -rn\_pro \rangle$  or  $\langle -ln\_pro \rangle$ . Their paradigm is given in Table 3. The possessive suffix may attach directly to the possessed noun or to one of eight possessive classifiers that either precede or follow the head noun. Possessive classifiers themselves are mostly glossed as sub-constituents, thus either  $\langle ln \rangle$  or  $\langle rn \rangle$ , yielding  $\langle ln\_ln\_pro \rangle$  and  $\langle rn\_rn\_pro \rangle$  respectively. Examples:

```
(44)
          dir
                   =k
                           vilvil
                                   =\bar{e}n
                                         nak
                                                mu
                                                          -re
          3<sub>PL</sub>
                   =TAM2 RED:tie =ART canoe POSS.GEN -3PL
      ## pro.h:a =lv
                          v:pred =ln
                                         np:p rn
                                                          -rn_pro.h:poss
      'Then they tied up their canoes.'
                                                                        [mc_veraa_jjq_0032]
(45)
                 le
                               ko
                                                                 nak
                         =n
                                         -ru
                                                                        su-suō
          zero take
                         =ART POSS.VES -3DL
                                                          =ART canoe RED-paddle
      ## 0.h:a v:pred =ln
                               ln
                                         -rn_pro.h:poss =ln
                                                                np:p
```

```
(46)
               'ama
                      man kur
                                    sa
                                               ruwa
                      PFV devour EMPH ART two.people
      ## ln
              np.d:a lv
                           v:pred other ln
      ni-ni'i
                -duō
                                 ē
      RED-child -1DL.IN
                                 DEM3
      np.h:p
                -rn_pro.1:poss rn
      'The devil has already devoured our (DL) two children.'
                                                                     [mc_veraa_pala_0226]
```

Possessive classifiers may also function as the head of a common NP, and are in these cases treated like any other directly possessed noun in this function. While Vera'a does not have a full-fledged subject indexing system like many other Oceanic languages, the paradigm of the morpheme glossed TAM2 here (labelled "aorist" by François 2009) has a distinct forms for the second and third person singular,  $\bar{e}$  and ne, respectively. This information is reflected in the GRAID annotation by treating ne as a sub-constituent with a bound person marker:

```
(47)
                   Qo'
                          ne
                                      van
                                              ma
                                                           ne
         PERS.ART Q.
                          TAM2:3sg
                                              hither zero TAM2:3sg
                                      go
      ## ln
                  np.h:s lv-pro.h:s v:pred rv
                                                    0.h:a lv-pro_h_a
      rēv
             sur
                   ēn
             down ART
      drag
      v:pred rv
                   ln
      'Qo' came and dragged down his canoe.'
                                                                    [mc_veraa_jjq_0117]
```

As this bound person marker is the only possible bound form for S and A function, these can be quantified distinctly from other person markers in these functions by counting  $\langle pro \rangle$  and  $\langle -pro \rangle$  separately.

#### 2.2.6 Further types of expression

There are some further elements that potentially pose problems in terms of their analysis and glossing of formal properties: oblique pronominal forms, demonstratives, interrogative nouns, conjoined NPs, and others.

Oblique pronominal forms. Vera'a has two special pronominal forms that are restricted to oblique argument functions, typically expressing a location or goal. Their form is rendered as (other) in GRAID, as in (48) and (49) below.

```
(48)
          mul
                        lē
                  ma
                             =n
                                    vunu
                  hither LOC =ART village
         go
      ## v:pred rv
                        adp = ln
                     dir
                                     'ōg
                                             bēne
              а
                               =s
              REL
                     3<sub>PL</sub>
                              =sim stay
                                             OBL.PRO
      #rc_rn other pro.h:s =lv v:pred other:1
      "...went to the village where they lived."
                                                                      [mc_veraa_tnu01_0012]
(49)
                    Qo'
          e.
                            ne
                                         van
                                                 ma
         PERS.ART Q.
                           TAM2:3SG
                                         go
                                                 hither
                   np.h:s lv-pro_h_s v:pred rv
          ne
                             rem
                                     rōw
          TAM2:3SG
                      zero climb
                                     seawards OBL.PRO
      ## lv-pro_h_s 0.h:s v:pred rv
                                               other:g
      'Qo' came and dragged down his canoe, climbed onto it and ...'
                                                                        [mc_veraa_jjq_0117]
```

They are classified as locative adverbs and glossed (other) in terms of form as they are not personal pronouns in the narrow sense.

*Demonstratives.* The demonstratives  $n\bar{e}(\bar{e})$  and  $g\bar{e}n$  can form a referential expression and function as an argument. It always has deicic (Deixis am Phantasma in narratives) or discourse-deictic reference. They are always glossed  $\langle \text{dem\_pro} \rangle$ , as in (50).

```
(50) n\bar{e} = n 'er\bar{e} ni-ni'i -k wal DEM1 = ART PL RED-small -1sG once ## dem_pro:s = ln ln np.h:pred -rn_pro.1:poss other '[Oh, people,] this is truly my kids (whose voices we are hearing).'
```

Almost all other demonstrative forms are derived from these two basic forms. They occur either as satellites in NPs, glossed simply  $\langle rn_dem \rangle$ , or as modifiers on the clause level, then glossed  $\langle other(\_dem) \rangle$ . The addition of  $\langle \_dem \rangle$  is not done consistently in these latter cases.

Interrogative and indefinite expressions. Vera'a does not have interrogative or indefinite pronouns, and instead NPs headed by interrogative-indefinite nouns fulfil the respective functions. Examples:

```
(51)
            si
                   kumru
                                    mi'ir
                                            rōs
                             wo
            if
                   2DL
                             and
                                    sleep
                                            NEG2
      #neg other pro.2:s other v:pred other
          kumru
                   =m
                           r\bar{o}\bar{n}
                                        sava ...
          2DL
                   =TAM1 hear
                                   ART what
      ## pro.2:a =lv
                           v:pred ln
                                       np:p
      'If you don't sleep at night, what you hear...'
                                                                        [mc_veraa_mvbw_0102]
          nikē
(52)
                             sē
          2sg
                   PERS.ART who
      ## pro.2:s ln
                             np:pred
      'Who are you?'
                                                                         [mc_veraa_jjq_0227]
```

Complex NPs. In complex NPs the gloss for the entire phrase is aligned with the first nominal head, and all other constituents to the right are glossed  $\langle rn \rangle$ , with sporadic further specifications of form and animacy, as for instance in (53). Only possessors are specified for their function, see (54).

```
(53)
                           vēvē-gi
                                       duru
                                                =k
                                                        sik
                                                                di
         ama-gi
                     =n
                                                                         SO
         father-3sg =ART mother-3sg 3DL
                                                =TAM2 search 3sG
                                                                         QUOT
      ## np.h:dt_a =rn
                          rn_np.h
                                       pro.h:a =lv
                                                       v:pred pro.h:p other
      'His father and mother, they looked for him.'
                                                                     [mc_veraa_iswm_0179]
(54)
          diñ
                              nimē
                                                              'amaruō
                ma
                                    \bar{m}_0-n
                       =n
                                                    ρ
                                                                             wo
                                                                                  =n
          reach hither =ART house POSS.house-CS PERS.ART father-3DL
                                                                             and =ART
      ## rv
                       =1n
                                                              rn_np.h:poss rn
                              np:p
                                                   rn
      vēvē-ruō
      mother-3DL
      rn_np.h:poss
      '[... ran] to the house of their father and mother.'
                                                                     [mc_veraa_pala_0217]
```

The preposition  $biri\bar{n}$  'with' can function as a coordinator on the NP level, and the modifier PP in these cases is treated as a sub-constituent, as in (55):

```
(55) kamabō'ōl birin ēn vēvē -maduō 'ōg-'ōgo
1TL.EX with ART mother -1DL.EX RED-stay
## pro.1:s rn rn rn_np.h -rn_pro.1:poss v:pred

'We two, together with our (two) mother, will stay behind.' [mc_veraa_mvbw_0127]
```

In cases where the coordination analysis is not clearly suggested by the syntactic distribution – the pronoun and PP in (55) occupy a single pre-verbal slot – it is treated as an oblique PP on the clause level expressing a comitative role, as in (56) and (57) below:

```
(56)
         duru
                  =k
                         van
                                 gis
                                      ēn
                                                 birin ēn
                                                           'erē wō'iqē
         3DL
                  =там2 go
                                 hold ART bow COM ART PL arrow
                         v:pred rv
     ## pro.h:a =lv
                                      ln
                                           np:p adp ln
                                                           ln np:obl
     'Then they grabbed (their) bows together with the arrows [and went.]'
                                                                    [mc_veraa_hhak_0109]
(57)
                  mom
                              kumruō birin ēn
                                                          -mru
                                                                                 gengen
```

zero put Del 2DL with Art Poss.eat -2DL =Art food ##ds 0.1:a v:pred rv pro.2:p adp ln ln -rn\_pro.2:poss =ln np:obl '... and (we) will take you together with your food.'

Pluralising particle 'ere typically occurs as a plurality-marking particle in NPs, as in (56) above, but is also used as a free form with second person non-singular reference in imperative constructions. Here it occupies a slot following a possible second person pronoun (see Section 3.2.1 on imperative constructions), and is glossed  $\langle other \rangle$  in these instances too, as in (58).

```
(58) ba 'erē su kal kel ma
but ZERO PL paddle up back hither
##ds other 0.2:s other:voc vother:pred rv rv rv

'But you guys paddle back here and come ashore...' [mc_veraa_hhak_0153]
```

# 2.3 Animacy and person of referential expressions

Referential expressions with human referents receive an animacy feature symbol  $\langle .h \rangle$ . Those with non-human referents that are anthropomorphized – typically capable of speech/thought, desires, planned actions – receive the feature gloss  $\langle .d \rangle$ . These non-human referents are typically certain spirits and animals in customary fables.

Where inanimate objects – typically rocks, reefs, trees – turn into human-like super-natural beings (called in Vera'a vu' or ama') in a narrative, the discourse referent in question is treated as inanimate as long as it does not appear as human-like, and as human-like where it appears as such. An example:

```
(59)
                                ... di
     a.
            SO
                   =n me'
                                          =m
                                                van
                                                        ma
                                                        hither
            CPL =ART reef
                                3sG = TAM1 go
         ## other =ln np:dt_s pro:s =lv
                                                v:pred rv
         rekse =n
                     'añsara
         like =ART person
         adp =ln np.h:obl
         "... that the reef, it had become like a human being."
             di
      b.
                            rērē
                                      kal
            3sg
                     =TAM1 crane.neck upwards
         ## pro.d:s =1v
                           v:pred
         'It craned upwards.'
                                                          [mc_veraa_isam_0023-0024]
```

As a rule, animacy features are assigned according to reference, not to classification of nouns. Reference is here treated as including class/generic reference, thus the gloss for  $a\bar{n}sara$  above includes  $\langle . h \rangle$ . Where the same noun is used to refer to a spirit, it is glossed  $\langle . d \rangle$ :

```
(60) 'ansara le =n me' ne tek me die so

person LOC =ART reef TAM2:3sG speak DAT 3sG QUOT

## np.d:s rn =rn rn_np lv-pro_d_s_ds v:pred adp pro.h:g other

'... then the person inside the reef said to him, ...' [mc_veraa_isam_0036]
```

Numeral expressions or NPs headed by the place-holder noun ge 'thingy' likewise receive animacy glosses by type of reference.

#### 2.4 Other elements

A number of other elements are only noted as such, and are mostly glossed (other).

#### 2.4.1 Adverbs and clause-level demonstrative forms

Adverbs and demonstratives on clause level are simply glossed (other). For demonstratives, additional tags are occasionally – but not entirely systematically – added, for instance (other\_dem1).

Temporal adverbs functioning as frame-setting topic expressions are likewise simply glossed (other), and no indication of this particular pragmatic function is noted in their glossing.

#### 2.4.2 Particles and conjunctions

Particles and conjunctions on clause level are also simply glossed  $\langle other \rangle$  in most instances. This is also true for all instances of the emphatic particle sa which precedes or follows the phrase it marks; further research is required in order to determine its nature.

Clause-connecting elements are all glossed (other). This comprises underived conjunctions like adversitive/theme-shifting ba, coordinative wo, the disjunction si, and subordinators like clause-combining  $\bar{e}$ , relativizer a, or the complementizer so, and so on.

Also glossed  $\langle other \rangle$  are words that appear to be de-verbal conjunctions, originally involving complex sentence structures. Typical examples are da 'do' and  $q\bar{e}$ ' 'finish' that occur clause-initially to mark causal or temporal relations between sentences:

```
(61) da bē di =m kalu ma
do water 3sG =TAM1 exit hither
## other np:dt_s pro:s =lv v:pred rv

'[The rain became really heavy.] And so the water came out [and carried away the trunk | live in].'

[mc_veraa_gaqg_0024]
```

In other cases, however, the structures involved seem to resemble complex sentences, the verb da 'do' heading a VC, thus clearly forming a clause entering a complex sentence structure. These are glossed as in (62).

```
(62)
                 =m
                         da
                                             di
                                                                             qañ
          CPL
                 =TAM1 do
                                      CPL
                                             3sg
                                                       =TAM1 climb
                                                                       ART side
                                                               v:pred ln
      ## other =lv
                        v:pred #cc other pro.h:a =lv
      ve'
             anē'ē
             DEM<sub>1.A</sub>
      rock
      rn_np rn_dem1
      'And consequently he climbed up this rock wall.'
                                                                         [mc_veraa_iswm_0128]
```

Thus, the first elements here are taken to form a matrix clause for a subsequent complement clause, licensed by the verb da. The matrix clause does not have a clearly referential subject in these instances, thus no zero argument is considered for glossing. Section 4.1 below provides more details on the glossing of complement clauses.

# 3 Clausal constructions with special features

In this section I discuss a number of clausal constructions that differ in some regard from the basic structures outlined above.

### 3.1 Negation and neutralization of syntactic categories

Negation in Vera'a is expressed by a separate set of TAMP (tense-aspect-mood-polarity) markers. Crucially, a VC marked with a negated-set marker can contain a nominal expression as its head that would in affirmative clauses form a non-verbal predicate, for example a noun phrase. Compare the following two examples:

```
(63)
             di
                                 ka-kalu rōs
                                                    den ēn
                                                              nimē
             3sg
                      GEN.NEG1 RED-exit GEN.NEG2 ABL ART house
      ##neg pro.h:s lv
                                 v:pred rv
                                                    adp ln
                                                              np:obl
      'He didn't leave the house.'
                                                                      [mc_veraa_iswm_0035]
(64)
                  nik
                                     Wowot wuva ros
      a.
                  2sg
                           GEN.NEG1 W.
                                             only
                                                    GEN.NEG2
           ##neg pro.2:s lv
                                     v:pred rv
           'You are not Wowot for no reason, ...'
                                                                      [mc_veraa_iswm_0029]
              ha
                              Wowot
      b.
                     nik
                                          sir
                                                  ēn.
                                                        sava
                     2sg
                              W.
                                          because ART what
           ## other pro.2:s np.h:pred adp
           "...you are Wowot because of something, [namely...]"
```

Thus, while the predicate in (64b) is a NP headed by the personal name  $Wow\bar{o}t$ , the predicate of in (64a) is treated like a VC due to the presence of TAMP marking and receives the  $\langle v:pred \rangle$  gloss (rather than  $\langle np:pred \rangle$ ) like the negated VC in (63). Even pronouns can be the head of negated VCs, and these are glossed likewise, though information about the pronominal form is added as follows:

```
(65) \bar{o} di r\bar{o}s
no 3sG GEN.NEG2
##ds.neg other pro_v:pred rv

'No. (That's) not him.' [mc_veraa_iswm_0326]
```

#### 3.2 Finite and non-finite clause constructions

Besides imperative clause constructions, there exist two potentially non-finite clause constructions. These are (A) a type of head-tail construction, and (B) a type of purposive clause construction, the so-called 'ga-construction', which occurs as the complement of the purposive preposition ' $al\bar{e}n$ .

#### 3.2.1 Imperative constructions

Orders, commands and similar speech acts may be expressed in Vera'a by an imperative construction in which an otherwise verbal predicate does not take TAMP marking. Lacking a finiteness feature, the predicate is glossed (vother). Overt subject pronouns may nevertheless occur, and thus where no overt subject appears a zero argument is glossed:

```
(66)
                                                    kolo -k
            nik
                     van
                                  m.a.
                                         lē
                                              =n
            2sg
                                  hither LOC =ART back -1sg
                     go
      ##ds pro.2:s vother:pred rv
                                         adp =ln
                                                    np:g -rn_pro.1:poss
      'Come onto my back, [and then we go].'
                                                                      [mc_veraa_isam_0025]
(67)
                  dam
                                mulumlum qe'i
            zero hand
                                slow
                                            a.moment
      ##ds 0.2:s vother:pred rv
      'Keep swinging for now, [I'll swing back, and then we go.]'
                                                                      [mc_veraa_anv_0060]
```

The same applies to non-singular subjects. Here, the pluralising particle  $\dot{e}r\bar{e}$  occurs adjacent to the verbal head. It is glossed  $\langle other \rangle$  (cf. Section 2.2.6 above), and its function is rendered as vocative,  $\langle : voc \rangle$ :

```
(68)
            kimi
                      'erē
                                  vrig
                                          qēl
                                                   wal row
                     PL
                                 rush
                                          descend once seawards
      ##ds pro.2:s other:voc vother rv
              lo
      а
      LOC.SP seaside
      adp
      "... you guys run down to the sea [and look for a tree...]"
                                                                         [mc_veraa_jjq_0439]
```

```
(69) 'erē gen sa =n gengen

ZERO PL eat EMPH =ART food

##ds 0.2:a other:dt vother:pred other =ln np:p

'You guys eat this food that ...' [mc_veraa_mvbw_0098]
```

#### 3.2.2 The ga-construction

A clause-like construction functions as the complement of the prepositions ' $al\bar{e}n$ ' or ' $am\bar{e}n$ ' and expresses a state-of-affairs that is the purpose of the action expressed in the matrix clause. The predicate in these constructions takes the stative marker ga and does not allow for overt realisation of the subject, thus no zero subject is noted and the head of the predicate receives the  $\langle vother:pred \rangle$  gloss.

```
(70)
               di
       a.
                                            kal
                                                    ba' lē
                                                                    goro lie
                                                                                'alēn
                        PROSP TAM2:3SG
                                            enter
                                                    into LOC =ART hole cave ASS
           ## pro.h:s other lv-pro_h_s v:pred rv
                                                        adp = ln
                                                                               adp
                                                                    np:g rn
           "... he wanted to go into the opening of the cave ..."
       b.
                      ga
                                                       tiktik 'alēn
                            le
                                                 ve'
                                          =ART stone small PURP
                      STAT take
           #cc:other lv
                            vother:pred =ln
                                                 np:p rn
                      ga
                            van
                                          ma
                      STAT go
                                          hither
                            vother:pred rv
           #cc:other lv
           "... in order to collect small stones to bring them and [smash open his canarium nuts.]"
                                                                        [mc_veraa_jsu_0121]
```

#### 3.2.3 The head-tail construction and zero TAMP marking

Vera'a seems to have a type of clause construction that resembles what has come to be called head-tail linkage or head-tail construction. A candidate for such a construction is the following:

```
(71)
                                          'ōg
                                                  'n
              womarawraw ne
      a.
              Spider
                             TAM2:3SG
                                         stay
                                                  del
           ## np.d:s
                             lv-pro_d_s v:pred rv
           'And so Spider stayed behind.'
      b.
                      'ōg
              zero stay
                              del
           ## 0.d:s v:pred rv
           'Stayed behind, ...'
              lē
                          qōn
                                           womarawraw ne
                                                                      dur
       c.
                   =n
                                    anē
              LOC =ART night
                                    DEM1 Spider
                                                         TAM2:3SG
                                                                      hollow zero
           ## adp =ln
                                                         lv-pro_d_a v:pred 0:p
                          np:other rn
                                           np.d:a
           "... and at night Spider began to hollow (it, i.e. the canoe)."
                                                                        [mc_veraa_jjq_0074]
```

As in this example, the clause essentially repeats the state-of-affairs expressed in the preceding one, leaving the same subject zero. No TAMP marking occurs. However, a would-be tail-head

construction is not straightforwardly distinguishable from other constructions with similar properties. For one thing, similar discourse-structuring functions are carried out by canonical finite constructions, as in (72b):

```
dir
(72)
       a.
                         =\bar{e}k
                                 lak-laka
               3<sub>PL</sub>
                         =TAM2 RED-dance
           ## pro.h:s =lv
                                 v:pred
           'Then they danced.'
               dir
                                 lak-laka
       b.
                         =\bar{e}m
                                             ē
               3рт.
                         =TAM1 RED-dance DEM3
           ## pro.h:s =lv
                                 v:pred
                                             other
           '[And as] they danced, ...'
                         =k
               duru
                                  'ēn
                                          ma
                                                 =n
                                                        lumgav
                                                                               vōwal
               3DL
                         =TAM2 see
                                          hither =ART young.man NUM.ART NUM-one
           ## pro.h:a =lv
                                 v:pred rv
                                                 =ln
                                                        np.h:p
                                                                    rn
           '... [the two were hiding in the bush,] they (the two girls) spotted a young man.'
                                                                           [mc_veraa_pala_0041]
```

On the other hand, constructions lacking overt TAM marking also occur in other contexts, as in (73–75), which are clearly not tail-head linkages, but the exact finiteness status of which appears to be yet unclear:

```
(73)
          dir
                   'ēn
                           vag-'ōl
                                     na-gi
          3pt.
                   see
                           ord-three ??-3sG
      ## pro.h:a v:pred np:p
                                     rn
      'They saw the third one.'
                                                                         [mc_veraa_jjq_0241]
(74)
                      'ēgel
                              suw
                                     ma
              ZERO descend down hither
           ## 0.h:s v:pred rv
                                     r٧
           '[He climbed the tree, picked a few (fruits),] (then) came down, ...'
      b.
                     bul
                              munmunō
              zero stone
                              shatter
           ## 0.h:a v:pred rv
           "... smashed them open, ..."
                     le
                                    m\bar{e} di
       c.
              ZERO transfer ZERO DAT 3SG
           ## 0.h:a v:pred 0:p adp pro.h:g
           "... smashed them open and gave (some) to him."
                                                                       [mc_veraa_mvbw_0052]
          kamabō'ōl birin ēn
(75)
                                                           'ōg-'ōgo
                                vēvē
                                         -maduō
          1TL.EX
                     with ART mother -1DL.EX
                                                           RED-stay
      ## pro.1:s
                     rn
                          ln
                               rn_np.h -rn_pro.1:poss v:pred
      'We two, together with our (two) mother, will stay behind.'
                                                                        [mc_veraa_mvbw_0127]
```

Thus, in (73) we seem to be dealing with a "normal" non-embedded independent clause. Yet, no TAMP appears between subject pronoun and verb. The chained clauses in (74) seem to resemble essentially the same type of structure, with the subject being left zero. In (75), the subject

is first person trial, and it may be possible that we are dealing with a zero allomorph of the TAM2 morpheme. The exact nature of these "zero TAMP markers" is yet unclear, and therefore, it seems, head-tail linkages are not clearly identifiable.

The practical conclusion from these combined analytical uncertainties is that we treat constructions without an overt subject as in (72) and (74) both as zero subjects, not distinguishing between would-be head-tail linkages and clause chaining. Again, systematic analyses of GRAID-annotated Vera'a corpora should eventually inform our analytic decision, rather than a premature analysis inform our glossing practice.

# 4 Complex sentences, direct speech, clause repetitions, and complex predicates

This section deals with the treatment of combinations of clauses into larger units, that is, complex sentences. I discuss the glossing of complement clauses (Section 4.1), adverbial clauses (Section 4.2), relative clauses (Section 4.3), embedded direct speech (Section 4.4), the handling of clause repetitions (Section 4.5), and clause-chaining constructions (Section 4.6) which are distinct from complex predicates involving serial verbs.

#### 4.1 Complement clauses

#### 4.1.1 Syndetic complement clauses

Syndetic complement clauses are clearly recognisable by the complementizer *so* that introduces them. They are glossed as in (76) and (77).

```
(76)
          nik
                         m\bar{o}r\bar{o}s
                                            nik
                   ga
                                                      ē.
                                                                   galala
          2sg
                   STAT want
                                     CPL
                                            2sg
                                                      TAM2:2SG
                        v:pred #cc other pro.2:s lv-pro_2_s v:pred
      ## pro.2:s lv
      '... (if) you want to know.'
                                                                            [mc_veraa_hb08]
(77)
          nik
                                'ēn
                                                                    di
                   ē
                                                          naw
                                                                           =m
                   TAM2
                               see
                                            CPL
                                                   =ART saltwater 3sG
                                                                          =TAM1
      ## pro.2:s lv-pro_2_s v:pred #cc other =ln
                                                         np:dt
                                                                   pro:s =lv
              vag-'ōl
      mēlē
      break
              MULT-three
      v:pred other
      'When you see that the waves broke three times, ...'
                                                                      [mc_veraa_jjq.e_0162]
```

The function of a complement clause is taken here as a unique function, as the structures involved do not resemble those of "regular" NPs with P function in the sense of Andrews (2007: 138ff.). Thus, no function gloss is added to the  $\langle \#cc \rangle$  gloss. Consequently, the other argument in the matrix clause bears S rather than A function. Note that syndetic complement clauses can never have the function of an S or A argument.

The complementizer so is related to the quotative so 'say' and glossed (other). In some instances complement clause constructions as discussed here can be hard to distinguish from direct speech, see Section 4.4 for details. Syndetic complement clauses show typical clausal prop-

erties: their predicate is TAM-marked, all arguments can be expressed, and all non-core positions are available to the left of the core, for instance the left-dislocated position, as witnessed by (77).

#### 4.1.2 Asyndetic complement clauses

Asyndetic complement clauses lack a complementizer, but are fully verbal and unreduced. They contain a TAM-marked VC functioning as predicate, and the subject may be realized overtly, but need not be. Examples:

```
(78)
           no
                    ga
                          mōrōs
           1sg
                    STAT want
      ##ds pro.1:s lv
                          v:pred
                              kaka
                                      birin nikē
             no
                      =k
             1sg
                      =там2 talk
                                     with 2sg
      #ds_cc pro.1:s =lv
                             v:pred adp
                                           pro.2:obl
      'I want to talk to you.'
                                                                     [mc_veraa_mvb_0087]
(79)
         lē.
                    masōgi
                              di
                                            mōrōs
              =n
                                       ga
         LOC =ART time
                              3sg
                                      STAT want
                    np:other pro.h:s lv
      ## adp =ln
                             vrigō
                 ne
          ZERO TAM2:3SG
      #cc 0.h:S lv-pro_h_s v:pred
      'When he wanted to run away ...'
                                                                    [mc_veraa_bsvh_0034]
```

Complement clause constructions with  $m\bar{o}r\bar{o}s$  'want' as matrix predicate are to be distinguished from constructions where  $m\bar{o}r\bar{o}s$  'want' occurs in a series with a following verb:

```
(80) nik ga m\bar{o}r\bar{o}s kur kamadu\bar{o} 2sG sTAT want devour 1DL.EX ##ds pro.2:a 1v v:pred rv pro.1:p 'You want to eat us.' [mc_veraa_paww_0072]
```

This construction is analysed as a serial verb construction (SVC) here, rather than a complex sentence where the matrix predicate would take a clausal complement, as in the English translation. There is no evidence for subordination in this construction in Vera'a, and the structure resembles exactly that of a SVC. Treatment of serial verb constructions is discussed in Section 4.6 below.

Another case of fuzzy boundaries between complement clause construction and other structures is represented by the set of examples in (81) and (82).

```
(81)
         di
                           'ēn
                   =m
                                       'ōw'ōw ēn
                                                    lōsō
                                                             -gi
                                                                              ga
                                                                                   sag
         3sg
                  =TAM1 see
                                       before ART testicles -3sG
                                                                              STAT sit
      ## pro.h:s =lv
                          v:pred #cc other ln
                                                    np:s
                                                            -rn_pro.h:poss lv
      lē
                 mē'ēmē
          =n
      LOC =ART door
      adp =ln
      'Then he saw that before his [a giant's] testicles had been sitting in the door(way).'
                                                                       [mc_veraa_isv_0084]
```

```
(82)
         di
                               'ēn
                  ne
                                                 'nsar
                                                        ne
                                                                  vō-wal
                                                                            ne
                  TAM2:3sg
         3sG
                              see
                                           ART person NUM.ART NUM.ART NUM-one
     ## pro.h:s lv-pro_h_s v:pred #cc ln
                                                np.h:s rn
                                                                  rn
                                                                            lv-pro_h_s
      van
     TAM2:3SG go
     v:pred
      "... then he saw a man coming up (to him)."
                                                                     [mc_veraa_mvb_0081]
```

While in (81), we find a complement clause with a clear left boundary marked by the left-most adverb, the construction in (82) could be analysed as subject-to-object raising. Again, nothing in Vera'a grammar forces such an analysis, and thus the complement clause analysis seems to be preferable. A reversed type of structure is found in the following set of examples:

```
di
(83)
      a.
                        ne
                                     diñ
                                             lik
                                                   ēn
                                                         lie
                                                               ne
                                                                         vōwal
                                                                                   anē'ē
               3s<sub>G</sub>
                        TAM2:3SG
                                     flick
                                             more ART cave NUM.ART NUM-one DEM1.A
           ## pro.d:a lv-pro_d_a v:pred rv
                                                   ln
                                                                                   rn_dem1
                                                        np:p rn
                                                                         rn
           'He flicked yet another one of those caves, ...'
      b.
                     lie
                                      wak
                           ne
               =ART cave TAM2:3sg open
           ## =ln np:s lv-pro_s v:pred
           "... and the cave opened."
                                                                   [mc_veraa_pala_0121-0122]
(84)
          di
                                diñ
                   ne
                                         ēn.
                                             lie
                                                   an\bar{e}
          3sg
                   TAM2:3SG
                                flick
                                        ART CAVE DEM1.A
      ## pro.h:a lv-pro_h_a v:pred ln
                                             np:p rn
                ne
                          wak
          ZERO TAM2:3SG open
      ## 0:s lv-pro_s v:pred
      'She flicked the cave open.'
                                                                        [mc_veraa_pala_0152]
```

As the first predicate in (84) does license a NP complement but not a clausal complement, the NP must be regarded as bearing P function. The following clause has a zero S argument, as is clear from comparison with (83).

The practical conclusion thus is that we gloss complement clauses in cases where this type of complementation is licensed by the matrix predicate in question, and gloss clause chaining in other cases.

#### 4.2 Adverbial clauses

The distinction between adverbial clauses and main clauses is not consistently represented in GRAID annotations of Vera'a texts. Vera'a is strongly paratactic and clues pointing towards complex sentence structure are often restricted to prosodic features. Adverbial clauses are glossed as such only where the occurrence of certain subordinators at the beginning of a clause makes this clear, as in (85). However, even in these latter cases the annotation of adverbial clauses has not been done consistently so that they are often simply treated like independent clauses.

```
(85) 'ōw'ōw den ēn vēvē -ru ne ma'
before ABL ART mother -3DL TAM2:3SG dead
#ac other adp ln np.h:s -rn_pro.h:poss lv-pro_h_s v:pred

di =m rusō
3SG =TAM1 sick
## pro.h:s =lv v:pred

'Before their mother died, she fell sick.' [mc_veraa_mvbw_0024]
```

Thus, in (85) the dependency of the two clauses is overtly marked, and the first clause is glossed as an adverbial clause.

#### 4.3 Relative clauses

Relative clauses are usually considered for GRAID annotation in Vera'a. They may be syndetic or asyndetic. The relativizing strategy in both types of relative clauses is gapping for core arguments, and the gap is considered a zero argument in GRAID  $\langle \emptyset(.x) : y \rangle$ .

#### 4.3.1 Syndetic relative clauses

Two examples of a syndetic relative clauses are given in (86) and (87) together with GRAID glossing. The relativizer a is glossed  $\langle other \rangle$ . Where a relative clause appears centre-embedded, its end is marked by  $\langle \% \rangle$ , as in (87).

```
(86)
        n
             bēlēl
        ART basket
     ## ln np:dt_s
                  rekso =n gōsuwō ga
                                           gis
            REL like =ART rat STAT hold
                                                  ZERO
     #rc_rn other other =ln np.d:a lv v:pred 0:p %
     di
           =m
                  wur
                         nēnēn
     3sg
           =TAM1 full
                         entirely
                 v:pred rv
     pro:s =lv
     'The basket that the rat took with him was full.'
                                                              [mc_veraa_gabg_0030]
(87)
            maru-n e
        ART uncle-CS PERS.ART woman
     ## ln np.h:s rn rn_np.h:poss
                         =m
                               ma'
                                      пē
                  ZERO = REAL dead
                                      DEM
     #rc_rn other 0.h:s =lv
                               v:pred other %
     'So the uncle of that woman that had died said, ...'
                                                               [mc_veraa_anv_0023]
```

#### 4.3.2 Asyndetic relative clauses

In asyndetic relative clauses, the relativized function is often the object, in which case the relativizing strategy is gapping. The respective gapped function is glossed  $\langle 0 \rangle$ , as in (88).

```
(88)
                                      vō-wal
              =n
                     vunuō ne
         LOC =ART island NUM.ART NUM-one
      ## adp = ln
                     np:g
                            rn
                                                   Hiw
              dir
                              ul
                        ga
                                            SO
              3<sub>PL</sub>
                                      ZERO QUOT Hiw
                       STAT call
                             v:pred 0:p
                                           other np:other
      #rc_rn pro.h:a lv
      "... at one island which is called Hiw ..."
                                                                        [mc_veraa_isam_0033]
```

However, asyndetic relative clauses with relativized zero subjects do seem to exist. These REDUCED relative clauses usually contain a ga-marked VC as their predicate which is in turn headed by a stative verb expressing a property, as in (89). Formation of this type of relative clause in Vera'a – as in many other Oceanic languages – is a means of modification by property words that are formally verbs and cannot usually function as modifier just on their own. Their GRAID glossing therefore does not reflect the relativisation structure but merely treats the stative marker ga and the following verb as  $\langle rn \rangle$ -glossed NP constituents, even in cases like this where the final adverb va'a' still' provides some evidence of the clausal status of this construction.

```
(89)
                                            'ekēnē
         duru
                   wunva
                                    ma'
                                                       lē
                                                            =n
                                                                            ga
         3DL
                   proabaly =TAM1 dead
                                            LOC.DEM1 LOC =ART year
                                                                            STAT
      ## pro.h:s other
                            =1v
                                    v:pred other:l adp =ln
                                                                  np:other rn
      mēw va'a
      many still
            rn
      'Probably they died there after many years, ...' [lit. 'in years that are still many.']
                                                                       [mc_veraa_iswm_0360]
```

Like complement clauses discussed above, reduced relative clauses potentially involve structural ambiguity as well. Two elicited examples illustrate this:

```
(90)
      a.
              nik
                                                  mē'ēmē ga
                                                                wak
                       TAM2:2SG
                                    see
                                             ART
                                                 door
                                                          STAT open
           ## pro.2:a lv-pro_2_a v:pred ln
                                                  np:p
                                                                rn
           'You see an open door, [go in this door].'
              nik
                                     'ēn
      b.
                        ē
                                                       mē'ēmē ga
                                                                     wak
                                                  ēn
              2sG
                       TAM2:2SG
                                    see
                                                 ART door
                                                               STAT open
           ## pro.2:s lv-pro_2_s v:pred #cc ln
                                                      np:s
                                                                     v:pred
           'You see (that) the door is open, [you may go in].'
                                                                                     (elicited)
```

Glossing decisions are made according to the context of the surrounding discourse, which involves among other things the specificity of the NP's referent.

Similar structures of relative clauses with gapped subjects are found with the simultaneous marker = s.

#### 4.3.3 Function of relative clauses

Where relative clauses function as modifiers in NPs, they are glossed (#rc\_rn), as they represent a constituent within the NP (see examples above). Vera'a also has headless relative clauses, and

their respective function and animacy features of their referent are annotated in GRAID. Thus, in (91), a relative clause functions as a P argument.

```
(91) di ne r\bar{o}\bar{n} =s ra-rara 3sG TAM2:3sG feel ZERO =SIM RED-Cry ## pro.d:a lv-pro_d_a v:pred #rc.h:p 0.h:s lv v:pred 'And he heard someone crying.'
```

#### 4.4 Direct speech

The occurrence of direct speech (or thought, content) is usually marked in Vera'a by means of a quotative marker *so* 'say'. It is analysed as a particle where it follows on a verb of speech or thought etc and receives the gloss (other), as in (92).

```
(92)
         n
              maru
                         -ru
                                          n.e.
                                                         tēk
                                                                 mē duru
                                                                               so
         ART uncle
                         -3DL
                                         TAM2:3SG
                                                         say
                                                                 DAT 3DL
             np.h:s_ds -rn_pro.h:poss lv-pro_h_s_ds v:pred adp pro.h:g other
           INTERI
      ##ds other
      'Their uncle said to them: Hey, ...'
                                                                     [mc_veraa_anv_0047]
```

As in this example, direct speech often comprises more than a single subordinate clause, and hence all clauses constituting direct speech are treated as independent clauses and receive the  $\langle \# ds \rangle$ . Moreover, clauses containing complements that resemble direct speech are not analysed as transitive constructions here, thus the subject of such a clause, expressing the "utterer", is glossed as  $\langle : s\_ds \rangle$ , where the  $\langle \_ds \rangle$  tag signals that the clause has a direct speech complement which may in other languages be analysed as a transitive object expression.

The quotative marker may also function as a predicate, as in (93a); in such cases, it is glossed (other:pred). In (93), the quotative marker functions as the predicate and occurs without a subject, which is a common way of signalling a shift of speaker-addressee roles in reported conversation.

```
(93)
                         Dōl
      a.
               e.
                                 so
              PERS.ART D.
                                 QUOT
                         np.h:s other:pred
           'After a while Dol said: ...'
                                  man qē'
      b.
                        no
                        1s<sub>G</sub>
                                 PFV finish
           ##ds other pro.1:s lv
           'Oh, I'm done.'
       c.
                      gie
                            man man
                 ART kava PFV stimulate 1sg
           ##ds ln np:a lv
                                  v:pred pro.1:p
           'I'm already drunk on the kava.'
                                                                          [mc_veraa_as1_0040]
```

```
(94)
                     so
              ZERO QUOT
          ## 0.h:s other:pred
          '(He) said, ...'
      h.
               ha
                      ruwa
                                             'isiruō
                                 m\bar{e} = n
               but
                      two.people DAT =ART same.sex.sibl-3DL
          #ds other np.h:voc
                                 rn
                                      =rn
                         =k
                                                viē
                kumru
                                 vanvan a
                         =TAM2 RED:go LOC.SP where
          ##ds pro.2:s =1v
                                 v:pred adp
                                                other:g
          "... Hey, you two brothers, where are you going?"
      c.
              ZERO QUOT
          ## 0.h:s other:pred
          '(He) said: ...'
                 kamadu = k
                                    siksik
      d.
                                                пō
                                                            -madu
                 1DL.EX
                           =TAM2 RED:search
                                                POSS.DOM -1DL.EX
                                                                              ART
          ##ds
                 pro.1:a =lv
                                    v:pred
                                                ln
                                                            -rn_pro.1:poss
           raw
          hermaphrodite.pig
          np:p
          "... We are looking for an intra-sex pig for us."
                                                                 [mc_veraa_as1_0011-0012]
```

### 4.5 Predicate or clause repetition

It is quite common in Vera'a narratives to stress the duration of an action or process, or the intensity of a property, by repeating the predicate. Though this type of repetition is of course part of the way of speaking in the language, and thus by no means "wrong" or "inferior", it is nevertheless not considered for the analysis of argument realisation, following the conventions of the GRAID manual. Repeated clause constructions are thus glossed (#nc), as in (95).

```
(95)
                                   =k
                                          sik
                                                  duruō
                   raga
                           an\bar{e}
         PERS.ART people DEM1.A =TAM2 search 3DL
     ## ln
                   np.h:a rn
                                   =1v
                                          v:pred pro.h:p
          sik
                 duruō
                            sik
                                   duruō ...
                            search 3DL
          search 3DL
                        #nc nc
     'Then everybody was looking for them, looking for them, looking for them, on
     and on ...'
                                                                     [mc_veraa_anv_0081]
```

## 4.6 Complex predicates versus clause chaining

As mentioned above, a VC in Vera'a may consist of more than one word, and further verbs (serial verb constructions), but also adverbs, or directional particles, may occur in the VC in addition to the head verb. Thus, we deal with only one single predicate in these cases, and thus only the head

verb receives the  $\langle v: pred \rangle$  gloss, other constituents being treated as additional sub-constituents, glossed  $\langle rv \rangle$ , as in (96) and (97). Note that in (96), an object pronoun occurs evidently inside the VC.

```
(96)
          dir
                   =\bar{e}k
                                   ba'a di
                                                              lē
                           q\bar{e}r\bar{e}
                                                  sar
                                                                  =n
          3<sub>PL</sub>
                   =там2 push
                                   into 3sg
                                                  bushwards LOC =ART
                                         pro.h:p rv
      ## pro.h:a =lv
                          v:pred rv
                                                             adp = ln
                  -gi
                                    =n
                                          nimē
      Poss.house -3sg
                                   =ART house
                  -rn_pro.h:poss =ln
                                          np:g
      'Then they pushed her into her house.'
                                                                        [mc_veraa_iswm_0171]
(97)
            nik
                                            kamaduō
                           mōrōs kur
                     ga
                                   devour 1DL.EX
            2sG
                     STAT want
      ##ds pro.2:a lv
                           v:pred rv
                                           pro.1:p
      'You want to eat us.'
                                                                        [mc_veraa_paww_0072]
```

Complex predicates clearly differ from chained clauses, even where this is not so obvious on first sight, as in (98) already discussed above.

```
(98)
                     'ēgel
                             suw ma
      a.
              ZERO descend down hither
           ## 0.h:s v:pred rv
          '[He climbed the tree, picked a few (fruits),] (then) came down, ...'
      b.
                     bul
                             munmunō
              zero stone
                             shatter
          ## 0.h:a v:pred rv
           "... smashed them open, ..."
      c.
                                   mē di
              ZERO transfer ZERO DAT 3SG
          ## 0.h:a v:pred 0:p adp pro.h:g
           "... smashed them open and gave (some) to him."
                                                                     [mc_veraa_mvbw_0052]
```

The analysis as a clausal chain rather than a complex predicate follows from combinatory rules applying to different categories of words, for instance a directional marker ma always occurs at the right margin of a VC.

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# **Appendices**

#### **A Paradigms**

#### A.1 Tense, aspect, mood, and polarity marking

Vera'a has a fairly complex system of tense, aspect, mood and polarity marking. Table A.1 provides an overview, arranging the total of 13 morphemes in two sets of markers, one with affirmative and one with negative polarity.

The TAM2 morpheme is the only one showing complex allomorphy, and the allomorphic variation is conditioned here by the person and number of the subject. See Appendix A.2 on person markers for the forms involved. Note that the functional aspects of TAMP marking in Vera'a requires more research. It seems, however, that for those categories with an informative label, the core set of functions can be described as such. Particularly problematic in this regard are the two most frequently occurring TAMP markers labelled TAM1 and TAM2 here. In everyday communication, TAM1 marked predicates seem to designate realis, known states-of-affairs situated in the past, or having come into being gradually in the present. TAM2-marked predicates on the other hand designate states-of-affairs that are new to the addressee, ongoing or situated in the future. The use of these markers in narratives is an even less understood issue, but it seems likely that it can be accounted for in terms of shifting of deictic centre/CT within a narrative. More research is expected to elucidate these issues. Note that in work by François, the Vera'a category TAM2 is analysed as 'aorist'; see for instance François (2009) on the development of aorist markers from person prefixes in North Vanuatu languages.

#### A.2 Person markers

Person markers in Vera'a are glossed only for the three categories of person, number and clusivity. Vera'a does seem to possess a genuine trial, the respective form probably being restricted to reference of three people. Morphological glossing does not reflect the syntactic function of person forms. Person suffixes always express possessors, and these possessive suffixes are distinguished from free person forms by the presence of a hyphen. Free forms can occur in a variety of syntactic functions, noted by GRAID glossing. Tables A.2 and A.3 provide the paradigms of free person markers and possessive suffixes.

All dual forms, as well as some forms within the free paradigm show variation in the presence vs. absence of a final vowel. This variation is conditioned solely by the prosodic environment of the forms. The omission of the initial syllable in non-singular inclusive free forms as well as that of the medial syllable in non-singular exclusive free forms, on the other hand, is restricted to a partiular syntatic slot, namely the pre-VC subject position.

As indicated above, the TAM2 marker shows complex allomorphy conditioned by the number and person of the subject. The marker thus constitutes a person marker, be it with a quite "deficient" paradigm or high degree of syncretism, making only rudimentary person and number distinctions. The paradigm is given in Table A.4.

According to François (2009), these forms historically derive from bound subject indexes that were prefixed to the verb in the respective proto-language of Vera'a and other closely related languages of the region. All of the non-singular forms k are related to the first person form which would have spread throughout the paradigm. In the trial, it seems we find an alternation between k and zero, also noted by François (2009). Note, however, that overt zero TAMP markers may have different origins, as discussed in Section 3.2.3 above.

a	ıffirmative	negative		
exponents	category	exponents	category	
= m = k, ē, ne mak ga me = s	TAM1 TAM2 immediacy stative future simultaneous	(e) rōs	general negative	
man mal	perfective remote past	'ēn	'not yet'	
		mas rōs	prohibitive	
me	ability	mas m̄as	disability	

**Table A.1** Vera'a free personal pronouns.

person	singular	dual	trial/paucal	plural
1 <sup>st</sup> incl.	_	$(gi)du(\bar{o})$	(gi)dō'ōl	(gi)dē
1 <sup>st</sup> excl.	no	$ka(ma)du(\bar{o})$	ka(ma)m'ōl	ka(ma)m
2 <sup>nd</sup>	$nik(ar{e})$	$kumru(\bar{o})$	kimi'ōl	kimi
3 <sup>rd</sup>	$di(ar{e})$	$duru(\bar{o})$	dir'ōl	$dir(\bar{e})$

**Table A.2** Vera'a free personal pronouns.

person	singular	dual	trial/paucal	plural
1 <sup>st</sup> incl.	_	$-du(\bar{o})$	-dō'ōl	- $dar{e}$
1 <sup>st</sup> excl.	-k	- $madu(\bar{o})$	-mam'ōl	-mam
2 <sup>nd</sup>	-m	$-mru(\bar{o})$	-mi'ōl	-mi
3 <sup>rd</sup>	-gi	$-ru(\bar{o})$	-r'ōl	-rē

 Table A.3
 Possessive (pronominal) suffixes in Vera'a.

person	singular	dual/plural	trial
1 <sup>st</sup>	=k	= <i>k</i>	= <i>k</i>
2 <sup>nd</sup>	$\bar{e}$	=k	=k
3 <sup>rd</sup>	ne	= <i>k</i>	= <i>k</i>

**Table A.4** Vera'a TAM2 person markers.

	demonstrative 1			demonstrative 2		
	plain	a-prefix	e-prefix	plain	a-prefix	e-prefix
basic set manner adverb time adverb 1	nē('lē) senē	anē('lē) asenē	esenē	gēn(ē) segēn(ē)	agēn(ē) asegēn(ē)	esegēn
time adverb 2 locative adverb	va'anē ('e)kēnē	va'anē akēnē	va'anē	va'agēn ('e)kēgēn(ē)	va'agēn ('e)kēgēn(ē)	va'agēn

**Table A.5** Vera'a demonstratives.

		interrogative		
	рем3	plain	a-prefix	e-prefix
basic set manner adverb locative adverb	$ar{e}$	viē siviē kiviē	aviē asiviē kiviē	esiviē kiviē

**Table A.6** Vera'a demonstratives and related forms.

	demonstrative 3 / interrogative		
	plain	a-prefix	e-prefix
basic set	nei	anei	enei
manner adverb			esenei
locative adverb	('e)kēnei	('e)kēnei	('e)kēnei

**Table A.7** Possible additional set of Vera'a demonstratives

#### A.3 Demonstrative forms

Vera'a has a large set of demonstrative forms which are systematically related to a 3-way system of basic demonstratives ( $\mathtt{DEM1-3}$ ) in the sense of Himmelmann (1997). Related to these are different types of adverbs. Apparently also formally related to all these forms is a set of interrogative forms. Tables A.5 and A.6 summarize these forms.

Possibly also related to these forms is a fourth set of demonstrative forms, glossed DEM4, see Table A.7. Their exact status is, however, not entirely clear at present. At least some of these forms may in fact be free variants of DEM1 forms, while others clearly seem to resemble temporal adverbs, for example *enei* 'now'.

Different sets of demonstrative forms show prefixing by two types of element. The *a*-prefix is probably the specific locative preposition a accreted to the respective plain forms of the basic demonstratives or manner adverbs. The a-prefixed forms of the basic set seem to be preferred with adnominal uses, though occasionally the plain forms are found in this function too. Both the plain and the *a*-prefixed forms of the basic set occur on clause level, namely clause-finally, with different functions: the plain forms seem to have reinforcing-assertative function ('You do know that this is true!'), while the latter has the function to mark the proposition of the clause as a common ground package to which further information will be amended in following propositions.

#### **B** List of corpus-specific GRAID symbols

The following is a list of the non-standard GRAID symbols used in the annotation of the Multi-CAST Vera'a corpus. Please refer to the *GRAID manual* (Haig & Schnell 2014: 54–55) for an inventory of basic GRAID symbols.

#### Form symbols and specifiers

⟨dem_pro⟩	demonstrative pronoun
$\langle dem\_other \rangle$	adverbial demonstrative
$\langle dem1\_other \rangle$	adverbial demonstrative 1
⟨dem2_other⟩	adverbial demonstrative 2
⟨dem3_other⟩	adverbial demonstrative 3
(dem4_other)	adverbial demonstrative 3

#### Function symbols and specifiers

```
<:s_ds> subject of a verb of speech
```

#### Clause boundary symbols

(#rc\_rn) relative clause as a subconstituent of a NP

#### Subconstituent symbols

⟨rn_dem1⟩	adnominal demonstrative 1
⟨rn_dem2⟩	adnominal demonstrative 2
⟨rn_dem3⟩	adnominal demonstrative 3
⟨rn_dem4⟩	adnominal demonstrative 4

#### Other symbols

⟨lv-pro⟩	bound verbal cross-index for the subject of the clause; reflects properties of the subject by combining with certain person/animacy symbols ( $\langle -1 \rangle$ , $\langle -2 \rangle$ , $\langle -h \rangle$ , and $\langle -d \rangle$ ) and function symbols ( $\langle -s \rangle$ , $\langle -s-ds \rangle$ , and $\langle -a \rangle$ ), e.g. $\langle -s-ds \rangle$ ; should not be conflated with corresponding nominal forms
⟨nc_⟩	<i>specifier:</i> marks form glosses with RefIND indices in segments otherwise not considered (i.e. those marked $\langle \#nc \rangle$ )

# C List of abbreviated morphological glosses

1		first person
2		second person
3		third person
ABIL1	me	ability; see Appendix A.1
ABIL2	$\bar{m}$ as	ability; see Appendix A.1
ABL	den	ablative preposition
ADN		adnominal
ART	$=(\bar{e})n$	common article, introduces common NPs
ASS	'amēn, 'alēn	associative prepositions
ASS.SP	'a	specific associative preposition
CARD		cardinal numeral (prefix)
CC	$ar{e}$	clause combining particle; may be the same as DEM3
COM	biriñ	comitative preposition
COR		correction
CPL		complementizer
CS	-n	construct suffix; a possessive suffix accommodating person NP possessors
DAT	$mar{e}$	dative preposition
DEICT		deictic
DEL	'i	delimitative aktionsart; post-verbal delimitative marker, not part of the TAMP system, see Appendix A.1
DEM1	nē	basic demonstrative 1; see Appendix A.3
DEM1.A	anē	prefixed basic demonstrative 1
DEM2	gēn	basic demonstrative 2
DEM2.A	agēn	prefixed basic demonstrative 2
DEM3	$ar{e}$	basic demonstrative 3
DEM4	nei	basic demonstrative 4
DEM4.A	anei	prefixed basic demonstrative 4
DIR		directional
DIS	-ge	dissociative possessive suffix, possessor unspecified
DISC	ē	discourse particle; has discourse-structuring function, probably introduces a new paragraph or theme
DL		dual
EMPH	sa	emphatic particle, can have focus-marking effect
EX		exclusive
FUT	me	future TAM marker; predicates refer to events posterior to CT; see Appendix A.1
GEN.NEG1	e	general negation 1; see Appendix A.1
GEN.NEG2	rōs	general negation 2; see Appendix A.1
HES		hesitation; particles, pauses, ellipses, etc.
IMM	mak	immediacy; predicate expresses SOA immediately anterior or posterior to $\operatorname{CT}$
IN		inclusive
INABIL1		inability
INABIL2	<i>m</i> as	inability; see Appendix A.1

INTENS		intensifier
INTERJ		interjection; covers various types
LOC	lē	locative preposition
LOC.DEM1	('e)kēnē	locative adverb 1; see Appendix A.3
LOC.DEM2	('e)kēnēn	locative adverb 2
LOC.DEM4	kēnēi	locative adverb 4
LOC.SP	а	specific locative preposition
MAN.DEM1	senē	manner adverb 1; see Appendix A.3
MAN.DEM1.A	asenē	prefixed manner adverb 1
MAN.DEM1.E	esenē	prefixed manner adverb 1
MAN.DEM2	segēn	prefixed manner adverb 2
MULT	vag-	multiplicative; derives iterative adverbs
NEG		negation
NMLZ		nominalization; usualy reduplicated in nouns, occasionally glossed RED-
NSG		non-singular; reduplicated in nouns, occasionally glossed RED-
NUM	$v\bar{o}$	numeral predix; fossilized prefix for cardinal numbers
NUM.ART	ne	numeral article; introduces numeral phrases (NumPs)
NY.NEG2	'ēn	'not yet' negation; occurs in right periphery of VC
ORD	na-	ordinal quantifier; resembles the possessive classifier
PART	'e	partitive article; restricted to particular types of possessive constructions
PERS.ART	e	personal article; non specified for sexus
PERS.ART.F	erō	personal article female; specialized form for female referents
PFV	man	perfective; predicates refer to events anterior to CT, see Appendix A.1
PL		plural; category of the person marker, co-occurs with person and clusivity glosses
PL	'erē	pluralizer; free particle
POSS.BED	bo-	possessive classifier for 'bedding possession' (e.g. bed, pillow, sheets)
POSS.CL		possessive classifier
POSS.DOM	no-	possessive classifier for 'domestic possession' (e.g. animals, crops, personal belongings)
POSS.DRINK	то-	possessive classifier for 'drink possession' (e.g. water, kava, juicy fruit)
POSS.EAT	go-	possessive classifier for 'eating possession' (e.g. food; also diseases)
POSS.GEN	mu-	possessive classifier for unspecifier possessive relationships
POSS.HOUSE	$ar{m}o$ -	possessive classifier for 'housing possession' (e.g. house, door(way), window)
POSS.VAL	bolo-	possessive classifier for 'possession of customarily valuable items'
POSS.VES	ko-	possessive classifier for 'vessel possession' (e.g. canoes, boats, trucks, planes)
PROH1	mas	prohibitive 1; see Appendix A.1
ркон2	rōs	prohibitive 2

PROSP	SO	prospective marker; might overlap with complementation, quotatives, etc.
PROX		proximal
PURP		purpose
QUOT		quotative
RCP		reciprocal
REC	ver-	reciprocal prefix
RED		reduplication; has different functions: non-singular, imperfective, distributive
REL	а	relativizer
REM.PST	mal	remote past; see Appendix A.1
SG		singular
SIM	=\$	simultaneity; predicate expresses SOA simultaneous with other SOA
SP		specific
STAT	ga	stative TAM marker; predicates express habitual, generic SOAs and properties
TAM1	= <i>m</i>	TAM1; see Appendix A.1
TAM2	$ne$ , $=k \bar{e}$	TAM2
TEMP.DEM1	va'anē	temporal adverb 1; see Appendix A.3
TEMP.DEM2	va'anē	temporal adverb 2
THING	ge	placeholder word; has either context-retrievable specific or non-specific reference
TL		trial; probably a genuine trial rather than paucal
VOC		vocative
ZERO		zero
NC		not classified



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