Chapter 7

Online and offline bridging constructions in Korowai

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Korowai has two main types of bridging constructions, recapitulative linkage (also known as "tail-head linkage") and summary linkage with generic verbs of doing, each with two subtypes that follow from the grammatical distinction between chained and adverbial or thematic types of clause combining. Recapitulative linkage with chained, switch reference marked clauses is by the far the most frequent type of bridging construction. It has three functions. First, a processual function, to give the speaker and addressee a processing pause in between two often lengthy clause chains. Second, it creates chains of clause chains, so called chaining paragraphs. The third function is to enable the speaker to continue referential tracking in the transition from one clause chain to the next. Recapitulative linkage with thematic subordinate clauses shares the processual function wih the chained type but it signals discourse discontinuity: it disrupts the event and participant lines and the speaker goes off the event line. Summary linkage allows speakers to be less specific in the scope of their anaphoric linkage, not necessarily taking the final clause of the previous sentence as their reference clause.

1 Introduction

Korowai is a Papuan language of the Greater Awyu family spoken by around 4000 persons in the area between the upper Becking and Eilanden Rivers and east of the headwaters of the Becking River in Indonesian West Papua, in the Boven-Digul regency (van Enk & de Vries 1997; de Vries et al. 2012). Korowai is a synthetic language, with agglutinating morphology and some fusion. Verb morphology is suffixing, but Korowai has a negation circumfix. Verbal affixes mark mood, modality, tense, aspect, negation, person and number of the subject

(S and A) and switch reference. The opposition Realis and Irrealis is central to the verb system, and tense is dependent on the Realis and Irrealis distinction, as in all Greater Awyu languages (Wester 2009). Korowai nouns have little morphology. Nouns may take possessive prefixes. Only kinship nouns have plural suffixes.

To understand Korowai bridging constructions and some of the grammatical terminology used in Papuan linguistics, it is crucial to introduce three major Korowai clause linkage patterns, conjoining, adverbial clause combining and chaining. The first two types are cross-linguistically common; the last type, clause chaining, occurs in many Papuan language families (especially in the cluster of families called the Trans New Guinea group) but is cross-linguistically less common. Conjoining of clauses (asyndetic or with coordinating conjunctions) is a relatively infrequent type of clause linkage (compared to clause chaining) in Korowai. Conjoining linkage joins two independent clauses of equal syntactic status, as in (1):

(1) if-e=xa abül=efè xongél=xayan waf-e=xa abül=efè this-tr=conn man=top big=very that-tr=conn man=top be-xongé-tebo-da neg-big-be[non1.sg.rls]-neg

'This man is bigger than that man.' (lit. 'This man is very big, that man is not big.') (van Enk & de Vries 1997: 71)

When coordinating conjunctions are absent, as in (1), it is only the intonational integration of the two member clauses under a joint contour that distinguishes a single conjoined sentence from two juxtaposed sentences.

Adverbial clause combining, with various subtypes, occurs when a clause functions as a peripheral argument of another clause or when a clause functions as an extra-clausal theme that precedes a clause with which it has a pragmatic relation of relevance. Adverbial (or better: thematic) clauses are marked by the general subordinator =xa and present information that the speaker wants the addressee to take for granted, as the given theme for the following assertion. The semantic function of the thematic clause may be explicitly marked as in (11b) but is often left implicit. The informational status of the theme clause is optionally but frequently marked by the topic clitic $=ef\grave{e}$ (with allomorphs $=fef\grave{e}$ and $=f\grave{e}$). There is an example of a thematic clause in (2) $bul-mexo=xa=fef\grave{e}$ 'given that he slaughtered'. The term theme is used here in the sense of Heeschen (1998) to denote thematization strategies found in many Papuan languages where thematic noun phrases or thematic clauses are marked in a loose sense as relevant domains or themes for the information that follows (de Vries 2006: 814–816).

(2) Faül dadü-ai=to=fexo Faül ül-nè Faül swim-go.down[NON1.SG.RLS]=DS=CONN Faül kill-SS *bul-mexo=xa=fefè* Faül ba-nggolol yaüya=pé fe-nè slaughter-do[NON1.SG.RLS]=CONN=TOP Faül chest-bone under=LOC get-ss fu=to=fexoméan dadü-ai put[NON1.SG.RLS]=DS=CONN dog swim-go.down[NON1.SG.RLS] dog ül-nè bul-fo=xa=fè kill-ss slaughter-make[NON1.SG.RLS]=conn=top méan-manop-yabén=tompexo di-béa-mo=daxu i=fexo dog-chest-fat=емрн get.out-rub-do[NON1.SG.RLS]=SS here=at wolaxip wolaxif=exa Faül müfe-xolol di heaven heaven=conn Faül back-bone cut.ss lamé-abo-lu dance-chase-move.up[NON1.SG.RLS]

'Faül came swimming downstream, after having killed and slaughtered Faül, he put its chest bone part beneath, and its back bone part he placed towards the sky and having killed and butchered a dog that came swimming downstream, he cut out the fat of the dog's chest and greased the back bone part of Faül and he chased it upward in a hurry.' (van Enk & de Vries 1997: 165)

Clause chaining combines switch reference marked clauses into often long sentences (called clause chains in Papuan linguistics) that end in a final clause with an independent verb form. That verb in the final clause of the chain has tense and mood scope over the preceding sentence. In canonical clause chaining languages of New Guinea, the verb types used in the final clauses are different from the verb types used in non-final or medial clauses. On the one hand, medial verb types cannot express the full range of tense, mood, person and number distinctions that final verbs encode, on the other hand medial verbs have slots for categories of interclausal relations absent in final verbs, namely switch reference (Same Subject – ss – or Different Subject – Ds – in next clause of the chain) and temporality (Sequence versus Simultaneity relations between the events of two adjacent clauses in the chain).

Like other Greater Awyu languages, Korowai is a non-canonical chaining language compared to many other languages of the Trans New Guinea type because its dedicated medial verb morphology is weakly developed (de Vries 2010). The only dedicated medial verb type is the Same Subject verb that consists of a verb stem plus an optional Same Subject suffix. There are also no dedicated Different Subject medial verbs in Korowai as found in more canonical Papuan clause

chaining languages. Instead, Korowai uses clauses with fully inflected independent verbs (the type that must be used in the final clauses of sentences) with switch reference clitics. This is the set of switch reference conjunctions in Korowai (van Enk & de Vries 1997: 109):

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=do(n) 'different subject'
=daxu(l) 'same subject'
=angu 'same subject/intentional'
=(le)lexu 'different subject/irrealis/anteriority'
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Chaining is by far the most used type of clause linkage in the Korowai texts available to us and chained clauses are strongly associated with thematic continuity within a clause chain.

Thematic adverbial clauses are associated with discontinuity, when speakers discontinue the flow of the main event and participant lines, either within a sentence, or in the transition from one sentence to another, for special reasons: to present background information, to mention circumstances that formed the cause or reason for an event of the main line, or to start a new paragraph (Farr 1999: 337, 363; de Vries 2005: 373). A typical Korowai clause chain, as in (2), contains switch reference marked chained clauses, with medial verbs (for example *ül-nè*) and with switch reference marked independent verb forms (*dadü*ai=tofexo). The final clause of the clause chain (2) contains the independent verb $lam \acute{e}$ -abo-lu. Within sentence (2), we find two thematic clauses bul-fo=xa=fè and bul-mexo=xa=fefè. They are not switch reference marked but they are marked for their informational role as themes by the topic marker $=(fe)f\hat{e}$. The event line of (2) is twice disrupted by these thematic clauses. The idiomatic translation of the first thematic clause reads 'after he had slaughtered' but the semantic functions that thematic clauses have (temporal, locative and so on) are usually left to be contextually inferred, and this is also the case in (2). A translation closer to the sense of the first thematic clause in (2) would be 'given that he slaughtered'.

Such generic thematic clauses are very versatile in terms of the wide range of interpretations that addressees may contextually infer. Thematic clause combining occurs in many Papuan languages with similar functions and may often be translated idiomatically with adverbial or relative clauses in English (Haiman 1978; Reesink 2000; Heeschen 1998; Foley 1986: 201). Consider example (3):

(3) Wa gol ülme-tél=exa=fè noxu-gol that pig kill-non1.pl[rls]=conn=top our-pig'The pig that they killed, is our pig.' ('given that they killed the pig, it is our pig').

If the assertion had been 'we are angry' instead of *noxu-gol* 'our pig', the interpretation would have been 'because they killed the pig, we are angry' (de Vries 2006: 826). Korowai has two main types of bridging constructions, recapitulative linkage (§2) and summary linkage (§3). Both types each have two subtypes that follow from the two types of clause linkage illustrated in (2) and (3), switch reference marked chaining linkage and *=xa* marked thematic subordinate linkage. The terms bridging constructions, recapitulative linkage, summary linkage, reference clause and bridging clause are used in this article as defined in the introductory chapter of this volume.

2 Recapitulative linkage

There are two subtypes of recapitulative linkage (formerly, tail-head linkage) in Korowai (de Vries 2005: 372–374). In the first type the bridging clause takes the form of a switch reference marked chained clause. The bridging clause of the second type is a thematic clause marked with the clitic =xa and optionally marked by the topic marker $=(fe)f\dot{e}$.

2.1 Recapitulative linkage with chained clauses

Recapitulative linkage with switch reference marked bridging clauses is by far the most common type of linkage of sentences in Korowai texts. Korowai speakers have a general tendency to prefer minimal clauses, preferably just a verb, and not to allow more than one argument (whether core or peripheral) to be explicitly expressed by noun phrases or pronouns, a tendency also found in many other oral languages of New Guinea and elsewhere (Foley 2000; Du Bois 1987). The preference for minimal clauses is not a grammatical constraint. Speakers can produce clauses with more than one overt argument and with complex noun phrases but they do so in specific contexts, for example introductory paragraphs of stories (de Vries 2005: 369).

Final clauses of sentences are also minimal clauses in most cases and this means that the reference clause usually has the form [(XP) V]. The same tendency towards minimal clauses also constrains recapitulative linkage with switch reference marked clauses in terms of what is repeated, omitted or added in the

bridging clause. As a general rule, bridging clauses in recapitulative linkage conform to the [(XP) V] minimal clause constraint and therefore they either repeat the lexical verb and its single overt (core or peripheral) argument or they omit the single argument, repeating just the lexical verb of the reference clause. When speakers choose to repeat arguments in the bridging clause, they probably do that to increase the redundancy of bridging clauses in order to enhance the processual function of bridging, as a badly needed pause or break between two lengthy clause chains packed with information. The presence of pause and hesitation markers, silences after the bridging clause and reduction of the number of syllables per second, all confirm this processual function. Adding arguments to the bridging clause that do not occur in the reference clause does not occur so far in the data available to us.

The text of (4), a small section from a story published in van Enk & de Vries (1997), consists of three sentences, each linked to the next one with recapitulative linkage of the chained type, creating a chain of sentences. The bridging clause in (4d) repeats the reference clause in (4c) including its single (peripheral) argument *melil=an* 'in the fire'. But the single core argument of the reference clause (4d), the object *ye=wafil* 'her husband', is omitted in the bridging clause (4e). By repeating the verb of the final clause of (4a), the reference clause, as the switch reference marked verb of the bridging clause, the switch reference tracking of the two given male participants is continued across the chain boundary between (4a) and (4b). This enables the Korowai listener to identify and keep track of the two male subject referents, the husband and the killer: the husband (he_i) is doing the sleeping and the DS marking on the sleep verb *élo-bo=do* signals to the listener that the next verb has a different subject referent, inferred to be the killer (he_i)

- (4) a. *i* lal xafén-telo-bo i wafil this woman awake-be-stay[NON1.SG.RLS] this man $\frac{\acute{e}lo-bo}{\text{sleep-stay[NON1.SG.RLS]}}$ 'the wife stayed awake, the husband was asleep.'
 - b. *élo-bo=do*sleep-stay[NON1.SG.RLS]=DS shoot-do[SS] put.into-do[NON1.SG.RLS]

 'He_i. (the husband) was asleep and he_j. (the killer, lover of his wife) shot him_i.'
 - c. *ül-mexo duol-mo=to=fexo* shoot-do[ss] put.into-do[non1.sg.rls]=ds=conn

gebelipexo=daxu <u>melil=an felé</u>
start.from.sleep[NON1.SG.RLS]=SS fire=LOC fall[NON1.SG.RLS]
'He; started from sleep and fell into the fireplace.'

d. melil=an felé=to=fexo <u>i</u> <u>la=to</u> <u>ye-wafil</u> fire=loc fall[NON1.SG.RLS]=DS=CONN this female=FOC her-husband <u>atilo</u> hold[NON1.SG.RLS]

'He fell into the fireplace and the woman held her husband down.'

e. atilo=dom=pexo lelip ati-ba-té=daxu hold[NON1.SG.RLS]=DS=CONN together hold-stay-NON1.PL[RLS]=SS ül-me-té=daxu mintafi laifa-té=daxu kill-do-non1.pl[rls]=ss valuables get.out-non1.pl[rls]=ss bando-ai=lo=fexo fe-nè carry-move.down[non1.sg.rls]=ids=conn take-ss fe-té=daxu luxaim melil dimexe-té put-NON1.PL[RLS]=SS move.up treehouse fire set-NON1.PL[RLS] 'She held him down, and together they held him down and killed him and carried the wealth items down (the tree house stairs) and put them there (on the ground) and climbed (back) up and set the tree house on fire.' (van Enk & de Vries 1997: 208-209)

The reference clause is in the majority of cases the final clause of the previous sentence but speakers regularly recapitulate the last two clauses of the chain, as in the two chained bridging clauses of (5b).

- (5) a. gexené gufe-tin-da gexené belén-è

 2PL demand.compensation-NON1.PL.IRR-NEG 2PL NEG.IMP-EX

 dé=xa lexé é <u>lenggilé-té=daxu</u>

 say[NON1.SG.RLS]=CONN reason pause be.frightened-NON1.PL[RLS]=SS

 <u>yaxati-mexe-té</u>

 renounce-do-NON1.PL[RLS]

 'Because he said "you must not demand compensation payments,
 - don't you do that", they became frightened and revoked (their claims)'
 b. lenggilé-té=daxu yaxati-mexe-té=do è
 be.frightened-NON1.PL.RLS=SS renounce-do-NON1.PL[RLS]=DS PAUSE

babo=fexo ye-pa fe-nè fo=daxu sit[NON1.SG.RLS]=CONN he-self take-ss take[NON1.SG.RLS]=SS 'They were frightened and renounced and..uh...he stayed until he

'They were frightened and renounced and..uh...he stayed until he himself married (another woman) and...'

The bridging clause is always the first clause of the sentence that it is part of. But the reference clause in recapitulative linkage occasionally is not the final clause of the previous chain but another clause that precedes the final clause, as in (6). The bridging clause of (6b) repeats the penultimate clause of the sentence (6a), *ébo-do*, and the final clause *nu be-ba-lé* is not chosen as the reference clause for the bridging clause in (6b).

- (6) a. xomboxai dé=do éba-té=do all.right say[NON1.SG.RLS]=DS sleep-NON1.PL[RLS]=DS éba-té=do ébo=do nu be-ba-lé sleep-NON1.PL[RLS]=DS sleep[NON1.SG.RLS]=DS 1SG sit-be-1SG[RLS] 'She agreed and they slept, they slept and he slept and I sat down.'
 - b. *ébo=do ülmexo-ülmexo-ma-té* sleep.NON1.SG.RLS=DS shoot-shoot-iter-NON1.PL[RLS] 'He slept and they gave him several injections.'

From a typological perspective Korowai recapitulative linkage with switch reference marked bridging clauses has an interesting feature: it is not restricted to reference clauses with declarative mood (as in other languages with recapitulative linkage). In a clause chain, all clauses are under the mood, modality and tense scope of the verb of the final clause: for example in (7a) the medial verb *bando-xe-nè* receives an imperative reading under the scope of the imperative verb in the final clause. The following text in (7) shows how imperative final clauses are recapitulated in imperative bridging clauses:

- (7) a. wof-e=xa mbolow=è ge-mba-mbam=pexo if-e=xa there-tr=conn ancestor=voc your-child-child=conn this-tr=conn bando-xe-nè lé-m=é bring-go-ss eat-imp.2sg=ex

 'Oh forefather over there, with your children, you should take this and eat it!'
 - b. *lé-m=daxu* noxup dél=o füon=o
 eat-IMP.2SG=SS 1PL bird=COORD marsupial.species=COORD
 gol=o fédo-m=do le-fén=è
 pig-COORD give-IMP.2SG=DS eat-IMP.1PL=EX
 'Eat and give birds and marsupials and pigs for us to eat!'

- c. damol fo fe-nè fu woto=fexa mbolo=fexo
 back get[ss] get-ss put[ss] sacred.place=one grandfather=conn
 ge-mambüm=pexo ge-yano=fexo ge-ni-xül=fexo
 your-children=conn your-people=conn your-wife-pl=conn
 if-e=xa bando-xe-nè le-mén=é
 here-tr=conn bring-go-ss eat-imp.2pl=ex

 'And having put down the back part (of the sacrificial pig) (they say),
 "hey, you forefather of that certain sacred place, with your children,
 your people and your wives, you should take this and eat it!"'
- d. le-mén=daxu [noxu lép-telo-xai=xa] noxu
 eat-2PL:IMP=SS 1PL ill-be[NON1SG]-IRR=CONN 1PL
 mano-pa-mon=do xi-telo-fon=è
 good-CAUS-IMP.2PL=DS healthy-be-IMP.1PL=EX
 'You must eat it and if we fall ill, cure us and let us be healthy.'
 (van Enk & de Vries 1997: 159–162)

The exclamative vowel clitic $=\dot{e}$ (that strengthens the appellative force of directive speech acts) is not repeated in the bridging clause. Imperative and hortative bridging clauses also occur in other Greater Awyu languages, for example in Mandobo in (8):

- (8) Mandobo (Greater Awyu)
 - a. Mene mbo urumo e-gen doro, igia kondep men this top little be-rls[nonisg] conn, again another give.imp do makmo to agöp ke-n do timo-p conn add conn much be-[irr]nonisg conn receive-[irr]isg 'This is too little, again give me more, add (until) it is much and let me receive it.'
 - b. Timo-p to kare e-gen do, imban receive-[IRR]ISG CONN, enough be-RLS[NONISG] CONN, tooth keremo-n o, u mene ande-p.
 become-NONI.SG.IRR CONN pig this eat-ISG.IRR
 'Let me receive it, it will be enough, the teeth will be enough to eat this pig with.'

Recapitulative linkage with switch reference marked bridging clauses has three main functions. The first is referential participant cohesion: it continues the switch reference monitoring of subject referents from one sentence to the next.

Second, it creates discourse units of a type called "chaining paragraphs" by Farr (1999: 337–341): a chain of clause chains held together by recapitulative bridging constructions with chained bridging clauses. Consider example (9) from a text published by van Enk & de Vries (1997: 159–162), with three sentences, linked by recapitulative linkage in its chained form, creating a chaining paragraph, with internal thematic unity.

- (9) a. Wof=è gol ül-ma-té=daxu bando-lu there=conn pig kill-do-[rls]non1.pl=ss bring-enter[ss] xaim=an fe-nè fu <u>bume-ma-té</u> treehouse=loc get-ss put[ss] slaughter-hab-non1.pl[rls] 'After they have killed a pig there, they use to bring it to the tree house and slaughter it.'
 - b. **Bume-ma-té=daxu** ol di fe-nè slaughter-HAB-[RLS]NON1.PL=SS intestines get.out[SS] take-SS fu-ma-té=do ni-xü=to bando-xe-nè put-HAB-NON1.PL[RLS]=DS mother-PL=FOC bring-go-SS <u>ao-ma-té</u> cleanse-HAB-NON1.PL[RLS]
 - 'They slaughter it and remove the intestines and put it down and the women take (the intestines) and cleanse them.'
 - c. Ao-leful-mexo xaim gilfo-ma-té=do
 cleanse-end-do[ss] treehouse go.away-hab-noni.pl[rls]=ds
 gol-e-xal di-fu-ma-té
 pig-tr-meat cut-put-hab-noni.pl[rls]

 'When they have finished washing, they go away to the treehouse
 and (the males) cut the pig meat out and put it down.'

Chaining paragraphs are found in the main body of narrative texts after the main participants, time and place frames and the main topic of the story have been introduced in the first "thematic" paragraph(s) (de Vries 2005: 369). These initial paragraphs tend to lack recapitulative linkage of the chained type and tend to contain relatively many thematic noun phrases and thematic clauses. In contrast, chaining paragraphs are highly "verby", and consist of a number of (often long) clause chains, with each clause chain connected to the next by recapitulative chained bridging clauses. The third function of recapitulative linkage is processual: the verbatim repetition of information creates redundancy and temporarily lowers the amount of information being communicated. Although repetition in general may have all sorts of functions in discourse (emphasis, aesthetic

enhancement, mnemonic functions), the repetition in the context of recapitulative bridging constructions has a processual function: it gives a pause and a slowdown of the information flow (iconically reflected in a reduction of speed of speaking in the bridging clause). The final clause of a sentence, the reference clause of the bridging construction, has a falling intonation, with especially the last words receiving a very low pitch. This final low pitch contour is followed by a pause and then the bridging clause starts with a high pitch over the first words. This creates an intonational low-high pitch contrast between reference clause and bridging clause, as in Figure 1. Figure 1 is a simple PRAAT graph of the pitch contours of the reference and bridging clauses used in the recapitulative linkage of (10a) and (10b). Towards the end of the reference clause there is a sharp fall in pitch, followed by a pause. The bridging clause then starts at a much higher pitch, and this pitch contrast before and after a pause is characteristic for bridging constructions.

- (10) a. nu na=xa nu ne-yanop <u>nu na=xa</u>

 1SG 1SG=CONN 1SG 1SG.POSS-person 1SG 1SG=CONN

 <u>lexeli-bando-xa-xe-le</u> <u>de-lé</u>

 open-carry-go-IRR-1SG say-1SG

 'he is mine, he belongs to me, let me cut his ties and take him with me. I said'
 - b. na=xa lexeli-bando-xa-xe-lé de-lé=lo=fexo tidak gu

 1SG=CONN open-carry-go-IRR-1SG say-1SG=DS=CONN NEG 2SG
 be-lexeli-bando-xa-in-da
 NEG-open-carry-go-IRR-2SG-NEG

 'what is mine I will unbind and take with me, I said but (they said),
 no, you are not taking him away'

The narrator, Sapuru, tells a real-life first person narrative about how he tried to cut loose a captured person that his opponents wanted to kill and eat. In (10b) he narrates what he told his opponents and in (10b) the final clause (with the quote-marking verb *de* 'to say') is repeated in the bridging clause, but now there is a DS conjunction attached to the quote-marking verb, to indicate that what follows is the reply from the opponents (what they said). The bridging clause also includes the last clause of the quotation clause.

The very fact that the chain-final reference clause is repeated in the initial clause of the next chain implies that the repeated information is now given and in this sense in the background, just as this is the case in recapitulative linkage with thematic clauses (discussed in the next section). But the key difference

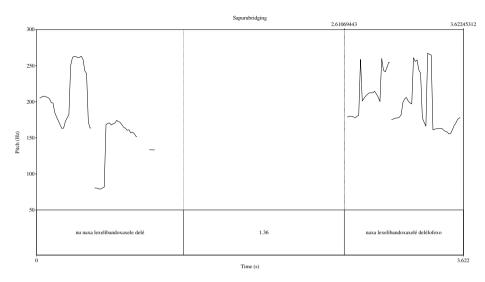


Figure 1: Intonation contour of example (10) extracted with PRAAT.

between the two types of recapitulation is that the chained bridging clause is informationally and syntactically an "online" clause that presents given information, while thematic bridging clauses are "offline" background clauses. The on line nature of chained bridging clauses makes this linkage type one of thematic continuity, both referentially through the continued switch reference monitoring of topical participants and in terms of sequential action continuity (the event line).

2.2 Recapitulative linkage with thematic clauses

This type is a less frequent type of recapitulative linkage in which the bridging clause takes the form of a thematic clause, marked with the subordinator =xa (and/or other subordinators), and optionally marked by the topic marker $=(f)ef\dot{e}$. It has two functions. The first function is the processual pause function that it shares with recapitulative linkage with chained bridging clauses.

The second function is to present the repeated information as an *offline* theme, a theme off the continuing event and participants line. The break in thematic continuity with the preceding clause chain is signaled by the discontinuation of switch reference monitoring and the obligatory presence of an independent verb form with TAM specification that is not under the scope of the TAM marking on the verb of the final clause. In contrast, a chained bridging clause presents the repeated clause as *online* information integrated into the continuing event and par-

ticipant lines. The chained bridging clause cannot be marked by a subordinator or the topic marker $=(f)ef\grave{e}$. The continuing event and participant lines are carried over the boundary between two consecutive clause chains by obligatory switch reference marking on the repeated verb in the chained bridging clause. In other words, chained bridging clauses form chaining paragraphs, but thematic bridging clauses disrupt and discontinue chaining paragraphs for various purposes, for example because the speaker wants to add important background information or wants to specify a reason why an event on the main event line happened, as in (11b).

Thematic subordinate clauses in Greater Awyu languages behave like noun phrases, and they may take markers that also go with noun phrases to express semantic or pragmatic relations, for example the general subordinator =xa, the reason marker $lex\acute{e}$ that marks the bridging clause of (11b) or the topic marker $=(f)ef\grave{e}$. It is this noun phrase characteristic that explains the association with disruption or "going offline" when thematic clauses are used as bridging clauses: the events they denote are not part of the main event line expressed by chained clauses.

(11) a. \ddot{u} $d\acute{e}$ =tofexo a gu \ddot{u} du-n-da gu-pa Ow! say[NON1.SG.RLS]=DS ah you ow! say-INF-NEG you-also \ddot{u} -axa- $l\acute{e}$ $d\acute{e}$ kill-IRR-1SG say[NON1.SG.RLS]

'Ow, he $_{i}$ said and he $_{j}$ said, ah you must not say, ow, I will kill you also' b. $d\acute{e}$ =xa $lex\acute{e}$ $lenggil\acute{e}$ =daxu say[NON1.SG.RLS]=CONN cause be.frightened[NON1.SG.RLS]=SS yaxatimexo

'Because he, said that, he, was afraid and renounced'

renounce[NON1.SG.RLS]

Compare the recapitulative linkage with thematic subordinate bridging in (11b) and with chained bridging in (12b), both involving the same verb of speaking *de* 'to say'. In (12b) the verb of speaking of the reference clause is repeated in a chained switch reference marked bridging clause, a bridging clause on the continuing event line. But in (11b) the same verb is repeated in a subordinate bridging clause, an offline clause that provides background information with regard to the event line. The switch reference monitoring of participants is carried across the boundary between (12a) and (12b). The chains (12a) and (12b) are chained into a chaining paragraph in which switch reference helps the listener to identify who

is doing what from one sentence to the other. But this switch reference monitoring is disrupted by the subordinate bridging clause of (11b) and the listener has to identify the referents of the subjects solely on the basis of the context.

- (12) a. le-bo=to=fexo nggé nabul nu ne-banun come-be[NON1.SG.RLS]=DS=CONN friend brother.in.law 1SG my-back bimo-m <u>dé</u> look-2SG.IMP say.NON1.SG.RLS

 'He came and said, Friend, brother-in-law, you must have a look at my back'
 - b. $d\acute{e}=do$ a ati woxelimexo=do ü yi-pa Say[NON1.SG.RLS]=DS ah hold turn[NON1.SG.RLS]=DS ow 3SG-self xayo baosa-m-bo mé-lai arrow pierce-do-be[NON1.SG.RLS] move-come[NON1.SG.RLS] 'He said, and as they turned him around, Ow, my!, he had come pierced with arrows!'

3 Summary linkage

There are two types of summary linkage of sentences. Both are used only occasionally. The first is with a demonstrative verb (w)amo(l)- 'to do/to be that/thus/in that way' in a chained bridging clause, as in (16b). The second type, rare in our texts, is with the same demonstrative verb but now in a =xa marked thematic clause, (18b). The demonstrative verb may also be used in other contexts as in (13) and (14).

- (13) yaxof-exa=lo wof=exa a-mo-mémo? who-conn=foc that=conn that-do-imm[non1.sg.rls] 'Who just did that?'
- (14) mülalüp nu-pa amo-ba-lé formerly I-self do.thus-PFV-1SG[RLS]'I myself have done things like that in former times'

The demonstrative verb (w)amo(l)- is used both to link sentences and to link clauses within sentences (as in (15), $wa-mo-n\grave{e}$), but the latter use is much more frequent than the use as bridging clauses in summary linkage, (16b). For example, the ss medial form of the verb $wamon\grave{e}$ is used to link clauses within the sentence in (15):

Example (16a) gives just the last two clauses of a chaining paragraph in directive mood, a prayer to the ancestors that accompanies a sacrifice (see examples (8–22) in van Enk & de Vries 1997: 160–162). It looks as if *wamolmo* in (16b) is used as a bridging clause that has the previous paragraph (the prayer as a whole, see 7) as its reference, summarizing and pointing back to it, rather than just the final clause of the prayer episode. The quoted prayer in directive mood with second person verb forms ends in (16a) and the narrator switches to third person subjects and to the habitual aspect in (16b) with summary linkage ('thus they always do') as the bridge between prayer and the continued narration.

- (16) a. $le\text{-}m\acute{e}n=daxu$ \underline{noxu} $\underline{im\text{-}ba\text{-}mon=\grave{e}}$ $eat\text{-}2PL.IMP=SS}$ IPL $see\text{-}stay\text{-}2PL.IMP=EX}$ 'you must eat and keep taking care of us'
 - b. wa-mol-mo mamaf bau thus-do-do.hab[ss] a.little sit[non1.sg.rls]

 'They usually do like that and then after a little while...'

In a summary linkage, the use of the generic demonstrative verb in the bridging clause allows speakers to point back in a vague and general way to what preceded, leaving it to the addressee to infer what the scope of the anaphoric reference is, for example the final clause of the previous chain, or the previous chain as a whole or even a whole episode (a chain of imperative sentences), as in this case where it points back to the whole prayer episode that precedes.

In the next example (17), the generic demonstrative verb seems to refer back to the final clause of the previous clause chain, although it can be taken to have the whole preceding clause chain in its scope:

(17) a. gexenép anè xa-mén=é dé=do él de-nè xenè 2PL HORT go-2PL.IMP=EX say[NON1.SG.RLS]=DS yes say-SS next lapangga=fexo xai-ba-lè=do pesau <u>maun=an</u> pesahu air.strip=conn live-be-1PL.RLS=DS aeroplane river=Loc aeroplane

<u>lai</u> come[NON1.SG.RLS]

'She told us to go (home) and we agreed and we waited at the airstrip until the plane landed on the river.'

b. amo=to=fexo noxu-peninggi bando-ai fe-nè do[NON1.SG.RLS]=DS=CONN 1PL.POSS-evangelist bring-descend take-ss fu=to=fexo put[NON1.SG.RLS]=DS=CONN

'It did so and he (=the pilot) brought our evangelist and...'

Example (18b) shows the use of the summary verb in a thematic bridging clause, the second subtype of summary linkage. The narrator of (18) had so far been denied tobacco, although he had tried to get tobacco from them in a friendly, teasing manner and the thematic bridging clause points back to that refusal.

(18) a. a noxup xeyop é-fu-ba-lè=lo=fexo <u>sü-lexé</u>

EX 1PL house sleep-make-stay-1PL.RLS=DS=CONN tobacco-reason

ne <u>bu-lelo-ba-lé</u>

1SG tease-be-stay-1SG[RLS]

'In the house we slept and I was teasing (them) for tobacco.'

b. amo-xa-tél=exa minya alip=ta alü-xa-léf-é
do-irr-2pl[rls]-tr=conn fuel here=loc burn-irr-1sg-ex
de-ba-lé
say-stay-1sg[rls]

'If you do so, I will raise a fire here by means of petroleum, I said'

4 Other ways to link sentences

Recapitulative linkage with chained bridging clauses is by far the most common device for connecting sentences in Korowai narrative texts but speakers may also use a small set of discourse conjunctions that occur mostly within sentences and mean something like 'next' or 'and'. These conjunctions (or verbs used as conjunctions) can be used also to connect sentences, for example (*me*)sé 'next' and *xenè* 'and'; 'next'. The latter is a medial ss form of the verb of going that can be used both as a lexical verb 'to go' and as a discourse conjunction meaning 'next'. *Xenè* may also precede a recapitulative bridging clause, as in (19b).

a. Ye loxté=do walüp=ta (19)walüp=ta 3SG go.away[NON1.SG.RLS]=DS half.way=LOC half.way=LOC au-pexo=do wa=fexo ve xülo maxava ve maxaya.bat voice-do[NON1.SG.RLS]=DS there=CONN 3SG upstream 3SG gup=to anè da-mo-m=é xe-bo=fexo go-stay[NON1.SG.RLS]=CONN you=FOC HORT hear-do-2SG.IMP=EX dé say[NON1.SG.RLS]

'He went away and halfway a maxaya-bat squeaked and there he went upstream and he commanded (the bat), let me know.'

b. xe-nè da-mo-m=é dé=do ye
go-ss hear-do-2sg.imp=ex say.non1.sg.rls=ds 3sg
loxté
go.away[non1.sg.rls]
 'And after he commanded, 'you should let me know', he (the bat) went away.'

The discourse conjunction (me)sé 'next, and' connects (20a) and (20b):

- (20) a. le-mén=daxu mano-pa-mon=é
 eat-2PL.IMP =SS good-make-2PL.IMP=EX
 'You should eat it and help (us)!'
 - b. mesé xobül=fexo woto=fexa fo fe-nè
 next leg=conn sacred.place=a.certain get get-ss
 fu-ma-té=daxu
 put-hab-non1.p[rls]=ss

'And then they usually take another leg and put it down on another sacred place, and..'

5 Conclusions

Recapitulative linkage of the chained type is highly frequent in Korowai narrative and procedural texts. It has three functions. First, a processual function, to give the addressee the time to process the information of the clause chain just heard and to give the speaker the time to plan his or her following clause chain. The processual function is also clear from prosodic patterns associated with recapitulative linkage. Second, it creates chains of clause chains, chaining paragraphs

or even chaining episodes. The third function is in the domain of participant cohesion: to carry switch reference monitoring of participants across from one clause chain to the next by chained recapitulative linkage.

In Papuan languages where recapitulative linkage with chained clauses functions in similarly frequent ways in conditions of thematic continuity, the absence of recapitulative linkage is a signal of thematic discontinuity in texts based on sequential event lines (de Vries 2005: 375). For example, Reesink writes how Usan in "paragraphing, then, makes use of a number of criteria, of which absence of tail-head linkage in narrative material is a major one, albeit not a sufficient condition" (Reesink 1987: 332). In Korafe the absence of recapitulative linkage marks various forms of thematic discontinuity such as shifts from speaker orientation to addressee orientation, shifts in time, scene, or character configuration (Farr 1999: 337, 363). This is also true for Korowai.

Recapitulative linkage of sentences with thematic clauses is a deviation from the default option, both formally and functionally, and associated with the disruption of switch reference monitoring of participants and with going off the event line to provide topical background information in relation to one or more events on the event line. It shares the processual function with the chained type of recapitulative linkage. It also shares the givenness of the recapitulated bridging clause with chained bridging but now as part of an explicit, marked presentation of the given clause as offline background, giving the addressee a strong signal that the flow of the narrative is disrupted for special purposes.

Summary linkage allows speakers to be more vague in terms of what the reference is of their anaphoric linkage with demonstrative-derived verbs. Summary linkage may refer back to the final clause of the previous sentence, to the previous sentence as a whole or even to the preceding chain of sentences. This makes it useful in conditions of thematic re-orientation.

Both recapitulative and summary linkage seem to be phenomena restricted in Korowai to event line based genres of texts where the chronology of the reported events is reflected in the order of the narration.

Recapitulative and summary linkage both involve non-main bridging clauses: ss clauses with medial verbs, ss or ds marked clauses with independent verbs and "adverbial" thematic clauses. Switch reference marked clauses with independent verbs are non-main clauses in the sense that, once they are integrated into the sentence by switch reference clitcs, they cannot independently select tense, mood or modality: they depend on the verb of the final clause of the chain for selection of these features.

Mixing of summary and recapitulative linkage has not been found so far in Korowai texts. Recapitulative linkage in the majority of cases implies verbatim

repetition of the reference clause(s). However, the only obligatorily repeated element is the verb of the reference clause. Omission of noun phrases, both core and peripheral arguments, occurs with some regularity, as is to be expected given the preference for minimal clauses with only a verb. Addition of nominal material to the bridging clause, elements that do not occur in the reference clause, is very rare.

Appendix

The Korowai text of this appendix was recorded and transcribed by Rev. G.J. van Enk in Yaniruma in the early 1990s. It is part of a folder with unpublished Korowai texts that Rev. G.J. van Enk gave me after his retirement from Papua. I use the text from the van Enk corpus numbered D.1.7 as an illustration of recapitulative linkages in Korowai. It is a short but complete text. I have reglossed the text and deleted the name of the main character because it is a real life story about witchcraft, a very sensitive topic in the Korowai community. The narrator is Fenelun Molonggai who talks about an interrogation of a suspected witch (N.) during a witch trial.

- (A1) noxup N. ati-lame-lè=daxu gup fala=xo=lolo? xe-nè yanop

 1PL N. hold-bind-1PL[RLS]=SS 2SG what=Q=FOC go-SS person

 mé-bol lé-lé-mba-tèl=exo=lo? <u>de-lè</u>

 ground-hole.(grave) eat-eat-hab-non1.Pl=Q=FOC say-1PL[RLS]

 'We had caught and bound N. and we said, what about you, did you use to go to burial places to eat people?'
- (A2) de-lè=lo=fexo él yup mündiyop=tanux ye-mayox=fexo say-1pl[rls]=ds=conn yes 3sg once=only 3sg-companion=conn yanop mé-bol xe-ba-tè dé person ground-hole go-pfv-non1.pl[rls] say[rls.non1.sg] 'We said and, yes he had gone only once with his mates to a grave, he said'
- (A3) yo anè umo-m de-lè=lo=fexo a gülé alümexon ADH ADH tell-IMP.SG say-IPL.RLS=DS=CONN INJ night full.moon alümexon=ta ye-mayox=fexo yanop mé-bol full.moon=in 3SG-companion=CONN person ground-hole

<u>xa-tè</u> <u>dé</u> go-non1.pl[rls] say[rls.non1.sg]

'Come on tell us, we said and, uh, on a clear moonlit night with full moon he and his companions had gone to a burial site, he said.'

- (A4) xa-tè=to=fexo yanop laxül ye-lidop=tanux faxte-nè go-Non1.PL[RLS]=ds=conn person corpse 3sg-one=only float-ss lu-falé-bo dé come.up-appear-PFV.Non1.sg say[RLS.Non1.sg]

 'They had gone and one corpse had floated up and had made an appearance, he said.'
- (A5) Alo-bo=do=mpexo maun nenilfo-bo=do=mpexo stand.up-pfv.non1.sg=ds=conn fluid much-sit[non1.sg]=ds=conn sendok=to=mpexo ali-mi-méma-tè=fexo yu spoon=ins=conn scoop-drink-imm-non1.pl[rls]=conn 3sg ali-féda-té=tofexo gololo. scoop-give-non1.pl[rls]=ds be.afraid[non1.sg.rls]

 'It (the corpse) stood up and there was much (corpse) fluid and they had just begun to scoop it up with a spoon and drink it and then they scooped it up for him to drink but he was afraid.'
- (A6) **gololo**=to=fexo ati-ba-té=daxu be.afraid[non1.sg.rls]=ds=conn hold-pfv-non1.pl=ss *va-xaxolof=an* ali-mexe-té=do 3SG.POSS-mouth=LOC scoop-do-NON1.SG[RLS]=DS me=do=mpexowasü sendok=to=fexo vanop drink[RLS.NON1.SG]=DS=CONN there spoon=INS=CONN person *ali-mi-xami-baxa-ti=fexo* rotten-water scoop-drink-sit-hod-non1.pl[rls]=conn külmexe-té=daxu=fexo vexenép xa-un=ngga finished-non1.pl[RLS]=SS=CONN 3PL go-INF=CONN lexe-mema-té=to=fexo vanop loxül aim-IMM-NON1.PL[RLS]=DS=CONN person corpse

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xau-meléai=do yexenép gilfa-té
down-descend[NON1.SG.RLS]=DS 3SG departed-NON1.PL[RLS]
dé
say[RLS.NON1.SG]
```

'He was afraid and then they held him and scooped the corpse fluid into his mouth and he drank it and they were scooping and drinking corpse fluid there until they were done and then they wanted to go away and when the corpse had sunk, they left, he said.'

Abbreviations

1	first person (speaker)	ITER	iterative
2	second person	IRR	irrealis
ADH	adhortative	LOC	locative
CAUS	causative	NEG	negative
CONN	connective	NON1	second or third person
COORD	coordinator		(non-speaker)
DS	different subject	PFV	perfective
EMPH	emphasis	PST	past
EX	exclamative	PL	plural
FOC	focus	POSS	possessive
HAB	habitual	Q	question marker
HOD	hodiernal past	RLS	realis
HORT	hortative	SG	singular
IMM	immediate	SS	same subject
IMP	imperative	TOP	topic
INF	infinitve	TR	transitional sound
INS	instrument	VOC	vocative

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