Logical Relations in Meramera

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Abbreviations

1, 2, 3	first, second, and third person respectively
CAUS	causative
CIRC	circumstance
CON	connective
CONTR	contrast
DA	direction away from
DEM	demonstrative
DT	direction towards
du	dual
ex	exclusive
HM	human noun marker
HON	honorific
in	inclusive
INTS	intensifier
IRR	irrealis
ITR	intransitive
KIN	kinship
LIM	limiter
NEG	negative
NEUT	neutral
NH	non-human noun marker
NOM	nominalised
NP	noun phrase
PERF	perfective aspect
pl	plural (more than two)
POS	possessive
PREP	preposition
RDP	reduplication
REC	reciprocal
REFL	reflexive
REL	relativiser
s	singular
THE PRO	thematic pro-form
TR	transitive
TRANS	transitiviser
V	verb

1. Introduction

In this paper we examine how logical relations function in Meramera.[1] There are various connectives used to help speakers communicate clearly with one another. However we also observed that in many cases a logical relation could be understood without a connective because the context made the proposition clear. In looking at clause level connectives we have ordered our paper according to Chapters 26 and 27 of Mildred Larson's book *Meaning-based Translation: A Guide to Cross-language Equivalence.* We have then added some observations about connectives used at discourse level. We used an inductive method to examine these connectives.

The examples included in this paper are taken mostly from natural texts.[2]

2. Logical Relations at Clause Level

2.1 Circumstance-HEAD

"**Circumstance**-HEAD is a relation in which the **circumstance** provides background information about the HEAD unit."[3] This information can include time, location or background. In Meramera a circumstance clause is normally marked by *do* or its variants *odo, odolo, iodo* and *iodolo*.[4] These are positioned at the end of the circumstance clause which precedes the HEAD. Below are examples of time-, location- and background- HEAD relations. The HEAD can optionally start with the conjunction *m-* as seen in Example 3.

1) *De   malada tolu   lou   i   pulu odo, a   uusi-na   golu iodo i*
   CON day   three INTS 3s finish CIRC NH sprout-NOM thing DEM 3s

   buo.
   big

   After three more days had passed the shoot which sprouted from it grew.

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[1] Meramera is an Austronesian language spoken by about 2000 people on the north coast of New Britain in Papua New Guinea. The Meramera language group spreads over the border between the Provinces of West New Britain and East New Britain. It is an SVO language.

[2] The texts we analysed make up about 1000 clauses and include narrative, instructional and hortative texts. We also received some input from Meramera speakers for which we are very grateful.

[3] page 289 Larson Mildred. 1984 *Meaning-based Translation: A Guide to Cross-language Equivalence* University Press of America: Lanham

[4] See Appendix E for further information on these forms.

2) *Seido tama-n-e   Diaa i   asu*
CON   father-POS-HM *** 3s go

u-sala   do, ei oite sele moni e   Diaa Aulu.
DT-outside CIRC 3s see   INTS LIM HM *** HON

Then going outside Diaa's father did indeed see Uncle Diaa.

3) *De   tua-na   i dam-ta-tala do,   m-ei vei l-e*
CON older_sibling-3sPOS 3s think-RDP[5] CIRC and-3s say PREP-HM

tasi-na   maido, "....
younger_sibling-3sPOS   thus

Now his older brother having thought said to his younger sibling thus, "…

It is however possible for the connective *do* to be absent and a circumstance-HEAD relation to be communicated, as seen in Example 4. Here the *m-* at the start of the HEAD is obligatory.

4) *Ei vasale-sale n-a   mado, m-ei saga   a*
3s walk -RDP PREP-NH shore and-3s be_surprised NH

mui-n-a   tavi-vi-ne   sou eli-eli   a   siloga.
place-POS-NH[6] woman-RDP[7] 3pl dig-RDP NH spring

Walking along the shore, he was surprised to see a place where women dig for water.

2.2 Orienter-CONTENT

"In the **orienter**-CONTENT relation, the proposition which is the **orienter** serves to introduce the CONTENT."[8] The **orienter** proposition includes propositions such as *He said to her….*, *He knew….*, *He wanted….*, and so on. There are different ways in which Meramera shows this relation. Firstly the CONTENT can be marked with an irrealis marker. This always occurs with the verb *kale* (to want) and often with the verbs *mapigogoi* and *puiale* (to be possible). It also often occurs where the orienter is a speech EVENT, see Example 7. Secondly the connective *ve* can be used. This is always used to indicate indirect speech. It can also be used in other kinds of orienter-CONTENT relations. The connective *maido* is normally used to introduce direct speech. Like *ve*, *maido* is used to indicate other orienter-CONTENT relations and in many of these cases *ve* and *maido* are interchangeable. However more commonly no

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[5] The reduplication here is the infix *-ta-* and the stem is *damtala*.
[6] The "human" words *bibi* (man) and *tavine* (woman) always take a non-human marker.
[7] The stem is *tavine* and the reduplication is the infix *-vi-*.
[8] *ibid* page 290

connector is used at all, see Examples 12 and 13. In each of the following examples the orienter clause is in bold.

5) *Maido[9]*   *m-e*   **ami**   **kale**   *n-o*   *valipute palipali*
    THE PRO and-HM 1du.ex want IRR-2s kill   INTS[10]

    sele   *a*   *bonu-bonu vuso.*
    INTS NH turtle-RDP all

    So we want you to completely kill all of the turtles.

6) **Ei ma**   **puiale ete**   *n-i*   *tabule a*   *lala-la-n-a*
    3s NEG   possible NEG IRR-3s carry   NH branch-RDP-POS-NH

    bolo buo. Ei saboa   buo.
    pig   big   3s not_yet big

    He is not able to carry the legs of a big pig. He is not big (enough) yet.

7) **Ami**   **bee-si**   *oo n-o*   *tavui ei.*
    1du.ex   command-PERF   2s IRR-2s marry 3s

    We have commanded you to marry her.

8) **Ei vei ve**   *ei iubi.*
    3s say that 3s strike

    She says that she struck (him).

9) **M-e**   **Pusi vei maido,**   *"De o asu!"*
    and-HM[11] cat   say thus   CON 2s go

    And Cat said thus, "Alright, you go."

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[9] When *maido* occurs at the beginning of a clause it has a head-tail linkage function. It is a pro- form for the preceding proposition, which it refers back to. *maido* has a semblative function and could be glossed by the English *like that*. We refer to it in this paper as a thematic pro-form.

[10] the adverb *palipali* occurs when the verb is transitive. When the verb is intransitive *palupalu* is used.

[11] The word *pusi* normally takes a non-human marker but in this case it takes a human marker because the narrator wishes to personify it.

10) **Ea muada** maido[12] eina   i   ma-alepos-e[13]   eau luma
    1s   know   that   my_mother 3s CAUS-appear-TRANS   1s   house

n-a   aubu.
PREP-NH village

I know that my mother gave birth to me at home in the village.

11) **Sou muada i**   ve   ei mate-si n-a   avena tasa.
    3pl   know 3s[14] CON 3s die-PERF PREP-NH place   one

They know that he died in a certain place.

12) Sulu ini   a   namu-na   m-e   **su somiale** ei doana sele,
    3du drink NH water-3sPOS and-HM 3du feel   3s good   INTS

mamisi sele.
tasty   INTS

The two drink its juice, and they find it very good, very tasty.

13) **Ei damu** a   kuau odo   i kuba.
    3s think NH plane DEM 3s good

He thinks that the plane is good.

2.3 HEAD-equivalence

"HEAD-**equivalence** indicates that the two units convey the same meaning. They are equivalent."[15] We were not able to find many examples of this relation. Examples 14 and 15 are the only two cases of HEAD-equivalence which we were able to find. Meramera often uses repetition to emphasise an event or action. In these cases the verb is simply repeated as can be seen in Example 16.

14) Ei ma   ade oto. Ei vale   moni.
    3s NEG speak NEG 3s be_silent LIM

He did not speak, he was just silent.

_____

[12] In Examples 10 and 11 *maido* and *ve* are interchangeable. It would be possible to insert the particle *i* into Example 10, so it would read *Ea muada i maido* …. It would also be possible to simply say *Ea muada i* ……. followed by the dependant clause. As far as we know each of these variations has the same meaning. So far no examples of *Ea muada ve*….. have been found.

[13] *alepose* is a contracted form of the underlying form *alaposa-e*. In the contracted form the second vowel *a* becomes *e*.

[14] See Appendix B for an explanation of *i*.

[15] *ibid* page 294

15) *Ea pipigo n-a   lodo, malada, asu lodo lou,   pipigo lou,   asu*
    1s work   PREP-NH night day_time go   night INTS[16]work   INTS go

    malada.   Manoa-na boa.
    day_time rest-NOM none

    I worked at night and during the day, night time came again and I worked and continued until the following day. There was no time to rest.

16) *Ei iubi   a   ase-n-a   aliusu.* **Ei   ase-pala-la.**   **Aliusu i**
    3s   strike NH mouth-POS-NH snake 3s   mouth-open-RDP snake 3s

    ase-pala-la,   *Klemen iubi a   ase-na.*
    mouth-open-RDP ****** strike NH mouth-3sPOS

    He struck the snake's mouth. *It opened its mouth. The snake opened its mouth* and Klemen struck its mouth.

2.4 HEAD-amplification

"HEAD-**amplification** is a relation between two communication units in which one of the units communicates all the information in the other together with some further information."[17] The extra information can be about location, time, manner or instrument. In the first example the amplification unit gives information about instrument, and in the second example it gives information about location.

17) *Klemen iubi   a   ase-na.   Ei iubi   a   lumusu.*
    ****** strike NH   mouth-3sPOS 3s strike NH spear

    Klemen struck its mouth. He struck (it) with a spear.

18) *M-a   lipu min-ei pu. Ei pu bilesi u-tano   min-e*
    And-NH axe POS-3s fall 3s fall straight DT-down PREP-HM

    tame-tubu-na.
    KIN-grandchild-3sPOS

    And his axe fell. It fell right down to his ancestors.

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[16] *lou* is used as an intensifier when it modifies a noun or an intransitive verb and *lei* is used, as in Example 19, when it modifies a transitive verb.
[17] *ibid page 295*

2.5 GENERIC-specific

"In the GENERIC-**specific** relation, the specific part gives more precise detail. The GENERIC unit includes the information which is in the **specific** unit."[18] In the following example from Meramera the specific communication unit precedes the GENERIC. The GENERIC is in bold.

19) *Sou guale lei a moe tasa, sou langi-sobe ei m-oata.*
3pl take INTS NH pandanus_mat one 3pl cover 3s DA_above

M-e sou guale a tanga-tanga n-e sou, sou tau oata min-ei.
and-HM 3pl take NH basket-RDP POS-HM 3pl 3pl put on PREP-3s

Sou tau oov-i[19] *ei...*
3pl put hide-TRANS 3s

They took another pandanus mat and covered him from above. They took their baskets and put them on top of him. **They hid him...**

2.6 Comparison-HEAD

The relation of **comparison**-HEAD is based on the point of similarity between two units."[20] In Meramera the connectives *mane* or *tomane* are used when two things are similar, as in Examples 20 and 21. The connective *an-e/a* follows the adjective when a comparative degree is indicated, this can be seen in Example 22. The intensifier *lou* can optionally precede *ane* as in Example 23. In Meramera the tendency is that when a comparison is made, no information is left implicit and the item/person to which the comparison is being made is repeated in the second proposition, as in Example 23.

20) *Helen ei lago **man-e** Mai.*
**** 3s long like-HM ***

Helen is as tall as Mai.

21) *Ei **toman-a** maubi-na, moni **toman-a** maubi-na i se-sele boa*
3s like-NH fight-NOM CONTR like-NH fight-NOM 3s real-RDP NEG

It looks like fighting but it isn't real fighting.

22) *Bialla ei buo **an-e** Ulamona.*
**** 3s big PREP-HM *******

Bialla is bigger than Ulamona.

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[18] *ibid* page 295
[19] *oov-i* is a contraction of the underlying form *oovu-i*
[20] *ibid* page 297

In Meramera the superlative degree is often indicated by using the comparative degree with information stated that more than two people are being compared. This can be seen in Example 23. The intensifier *sele* can sometimes be used to indicate a superlative, as can be seen in Examples 24 and 25.

23) *Rowan vele vauta, moni   Ishmael vele vauta **lou   an-e   Rowan.***
     ***** run fast   CONTR ****** run fast   INTS PREP-HM *****

    *Klemen vele vauta **lou   an-e   sulu olu.***
     ****** run fast   INTS PREP-HM 3du both

Rowan runs fast but Ishmael runs faster than Rowan. Klemen runs faster than both of them.

24) *Bialla ei buo **an-e   Ulamona, moni   e   Kimbe ei a   aubu***
     **** 3s big PREP-HM ******   CONTR HM **** 3s NH place

    *buo-buo **sele   min-e   West New Britain.***
    big-RDP INTS PREP-HM *** *** *****

Bialla is bigger that Ulamona but Kimbe is the biggest town in West New Britain.

25) *Anskar ei bisii-sii   **an-e   Davidson. Theodora ei   bisii-sii***
     ***** 3s small-RDP PREP-HM ******* ******* 3s small-RDP

    sele.
    INTS

Anskar is smaller than Davidson. Theodora is the smallest.

Although there is no point of similarity in the following example the construction is the same as would appear in a **comparison**-HEAD relation which describes a comparative degree.

26) *A   mauli-na min-au ei sea   **an-a   mauli-na min-e***
    NH live-NOM POS-1s 3s different PREP-NH live-NOM PREP-HM

    sou buo-buo.
    3pl big-RDP

My life (then) was different from the life of adults.

Alternatively a comparison which indicates a positive relation can be expressed by the verb *muga* (to be first/to be better). This verb can be used to make a more general

comparison than the examples listed above although the structure is very similar. The superlative can be expressed by *muge sulu/sou* (to supercede the two/all) The verb *muga* cannot be used when a negative comparison is made, for example *Ulamona is smaller than Bialla.*

27) *Ishmael m-e   Rowan su soke a   v-in-ele-na n-e   sulu. M-e*
    ****** and-HM ***** 3du begin NH run-NOM[21] POS-HM 3du and-HM

    *Ishmael ei **muga an-e**   Rowan. Mulimuli Klemen ei tamai vele m-ei*
    ****** 3s be_first PREP-HM ***** later   ****** 3s also run and-3s

    ***mug-e**[22]   sulu.*
    be_first-TRANS 3du

    Ishmael and Rowan began their race and Ishmael came before Rowan. Later Klemen also ran and he came before the two of them.

2.7 Manner-HEAD

"In **manner**-HEAD relations, the **manner** clarifies and supports the HEAD by providing information which answers a question, "*In what way, how* did the event take place?" It often refers to something which happened simultaneously."[23] In Meramera the word *toman-e/a* is used to indicate this relation and the HEAD precedes the manner.

28) *Muilogo i goli a   pipigo-na, **toman-e** tina-na   i vei l-ei*
    ****** 3s do NH work-NOM like-HM mother-3sPOS 3s say PREP-3s

    iodo.
    DEM

    Muilogo did her work as her mother told her to.

2.8 Contrast-HEAD

"The relation of **contrast**-HEAD occurs when there are at least two points of difference between the units and one point of similarity. One of the points of difference involves an opposition."[24] Normally in Meramera *moni*[25] is used to indicate contrast

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[21] The stem *vele* is marked by two nominalisers, the infix *-in-* and the suffix *-na*
[22] *mug-e* is a contraction of the underlying form *muga-e.*
[23] *ibid* page 298
[24] *ibid* page 299
[25] *moni* can be used to indicate contrast or also as a limiter as in Example 2

however it is also possible to use *m-*. In the following examples the point of similarity is not made explicit. In Example 29 *asu* and *ougu* share meaning because they are reciprocal concepts, this is also the case in Example 30 with *inosi* and *eili*.[26]

29) *Eina   ei asu u-sivo   seidei,* **moni**   *eau ougu luma.*
     my_mother 3s go DT-garden today CONTR 1s   stay house

   My mother went to the garden today, but I stayed at home.

30) *Sou vuso ino-si,*   **m-e**   *eau moni eili.*
     3pl all   go-PERF and-HM 1s   LIM exist

   They all went and I am the only one who stayed.

2.9 Reason-RESULT

"In the **reason**-RESULT relation the proposition which has the role of **reason** answers the question "*Why* this result?""[27] In Meramera this relation can be marked with the words *vuna, maido /m-* and *seido*. When *vuna* is used the RESULT precedes the reason, however when *maido* and *seido* are used the reason precedes the RESULT. The clause which comes first is the part which the speaker wishes to emphasise. Thus in Example 32 the speaker is strongly condemning the hearers and this is made explicit because the fact that they just stand back and watch appears in the first clause. We think that there may be a difference in the use of *seido* and *maido m-* . *maido m-* tends to be used when the speaker wishes to make a stronger statement. Thus in a hortatory text where the speaker is challenging the listeners *maido m-* is used rather than *seido*. *vuna maido* is also used in this way as seen in Example 34. In direct speech it is possible to communicate a **reason**-RESULT relation with no connective, as seen in Example 35.

31) *Ei lae-si,*   **vu-na**   *paga lodo-si.*
     3s be_afraid-PERF reason-3sPOS INTS night-PERF

   She was afraid because the night had come.

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[26] *ibid* page 300 Larsen explains this in more detail.
[27] *ibid* page 306

32) *N-e   amtou ite   tase moni a   muina, **maido   m-a***
    IRR[28]-HM 2pl look away LIM NH   continually THE PRO and-NH

vulo-vulo-na   sie.
cease-RDP-NOM DEM

You just stand back and watch, therefore this (work) does not progress.

33) *Ei masalo sele a   golu vi-vi.   **Seido** ei vei l-e*
    3s desire INTS NH thing fat-RDP CON 3s say PREP-HM

natu-na   lua do   maido, "…
child-3sPOS two DEM thus

She longs very much for meat, so she says to her two children, "….

34) *Amite tove sou m-ei loi   sele amiteu, **vu-na   maido**,*
    1pl.ex try 3pl and-3s make_difficult INTS 1pl.ex reason-3sPOS thus

mai-nani n-a   aubu n-e   eitou a   mai-buloi-na
DA-here   PREP-NH village POS-HM 1pl.in NH REC-help-NOM

boa.
none

We tried but it was not easy for us because there was no cooperation coming from the community.

35) *Ea bale,   ea ngolo.*
    1s be_tired 1s sleep

I was tired so I slept.

2.10 Means-RESULT

"**Means**-RESULT is the relationship in which the **means** proposition answers the question "*How* did this result come about?""[29] We have found no connective in Meramera which shows this relation. As far as we can find, this relation is either expressed by using two independant clauses, see Example 36, or by using an imperative as in Examples 37 and 38.

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[28] Meramera does not have tense, rather realis and irrealis modes. In Meramera the irrealis marker *n-* can mark normative, imperative, optative, deontic, future, intentional and probable actions.
[29] *ibid* page 307

36) *Ea sagali,   ea lapuale a   aliusu.*
1s be_strong 1s pull   NH snake

Being strong, I pulled the snake.

37) *N-eita   vole vauta, m-e   eita   oava.*
IRR-1du.in paddle fast   and-HM 1du.in flee

Let us paddle fast, and flee!

38) ***N-eito   magili pilu e   Hideki, n-eito   sau-vu-vule   a***
IRR-1pl.in stand   with HM ***** IRR-1pl.in translate-RDP[30] NH

in-ade   min-e   eitou, n-i   gali u-lilo   min-a   lau-lau
NOM-say POS-HM 1pl.in IRR-3s enter DT-inside PREP-NH leaf-RDP

buo min-a   in-ade   n-e   Salemo.
big POS-NH NOM-say POS-HM God

By standing with Hideki, let us translate our language so that it will go into
the big book of the Word of God.

2.11 Purpose-MEANS

Purpose-MEANS is a relationship in which the MEANS proposition answers the
question "*What* was done in order to achieve this purpose?""[31] There are two ways of
conveying this relation in Meramera. Firstly the irrealis marker can be used as in
Examples 39 and 40. This can optionally be preceded by *ve* as seen in Example 41.
Alternatively the purpose proposition can be marked by the preposition *mina* followed
by a nominalised verb, see Example 42. This construction tends to occur more
frequently in written texts than in speech.

39) *Ei asu u-sivo,   n-i   pa go-n-a   in-ani.*
3s go DT-garden IRR-3s get thing-POS-NH NOM-eat

She went to the garden to get (some) food.

40) *N-eitou   tau a   go-n-a   in-ani   tunu-tunu u-tano,.*
IRR-1pl.in put NH thing-POS-NH NOM-eat hot-RDP   DT-down

n-ei   uba
IRR-3s to_cool

Let us put down the hot food to cool!

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[30] The stem is *sauvule* and the reduplication is the infix *-vu-*.
[31] *ibid* page 308

41) *Seido ei asu usi-no   n-a   nanu,*
CON 3s go DT-there PREP-NH river

ve   n-i   avutu.
CON IRR-3s bathe

So he went to the river to bathe.

42) *Su buloi e   ei a   in-asu   usi-no   min-a   malalei-na aani-na*
3du help HM 3s NH NOM-go DT-there PREP-NH see-NOM   eat-NOM

taula do.
big   DEM

They helped him go there to see the big feast.

2.12 Concession-CONTRAEXPECTATION

"The **concession**-CONTRAEXPECTATION relation has an element of "unexpectedness." There are three parts: 1) a **cause** (the **concession** part), 2) an **expected effect**, and 3) an **unexpected result** (the CONTRAEXPECTATION part)."[32] In Meramera the second part (the **expected effect**) is left implicit. There are two ways of expressing the **concession**-CONTRAEXPECTATION relation. The connective *moni* can be used as in Examples 43 and 44. It is however also possible to omit this connective as in Example 45. In direct speech after the concession proposition it is possible to simply say *boa*, which indicates that the action in the concession part did not achieve its goal as was expected or hoped for, see Example 46.

43) *Va-nu-nua so tilo-muli   e   ei, maigogoi a   malada padilua.*
man-RDP[33] 3pl look-follow HM 3s up_to   NH day   seven

Moni   sou ma poge ete   ei.
CONTR 3pl NEG find NEG 3s

The people looked for him for seven days, but they did not find him.

44) *Ea ugu tabaa   sele, moni   a   papao tasa ma vele oto.*
1s sit long_time INTS CONTR NH car   one NEG run NEG

I waited a very long time, but no car came.

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[32] *ibid* page 309
[33] The stem is *vanua* and the reduplication is the infix *-nu-*.

45) *Euma   bili ei a   go-n-a   in-ani,   ei ma kale ete.*
   my_father give 3s NH thing-POS-NH NOM-eat 3s NEG want NEG

   My father gave him some food (but) he did not want it.

46) *Ea tilo-tilo,   **boa**!*
   1s look-RDP   NEG

   I looked for it, but didn't find it.

2.13 Grounds-CONCLUSION

"The **grounds**-CONCLUSION relation answers the question "What fact is this conclusion based on?""[34] There are various ways in which this relation can be expressed in Meramera. The connective *seido* can be used, as in Example 47. The adverb *nane* can also indicate a **grounds**-CONCLUSION relation. It appears after the subject of the CONCLUSION proposition, as seen in Example 48. If the CONCLUSION proposition is a prediction then the irrealis marker is used with no connective, see Example 49. In all of the above cases the **grounds** precedes the CONCLUSION. However, in Example 50 the thematic pro-form *maido* followed by the connective *m-* is used and in this case the CONCLUSION precedes the **grounds**.

47) *Moni   sou ma   poge ete ei.*
   CONTR 3pl NEG find NEG 3s

   Seido sou vuso n-a   aubu sou muada i,   ve   ei
   CON   3pl all   PREP-NH village 3pl know 3s[35] CON 3s

   mate-si   n-a   avena tasa.
   die_PERF PREP-NH place one

   But they did not find him. So all the people from the village thought, that he had died somewhere.

48) *Ei ma   asu oto n-a   matetengi-na seidei, ei **nane***
   3s NEG go   NEG PREP-NH teach-NOM   today 3s perhaps

   sobe.
   be_sick

   He did not come to school today perhaps he is sick.

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[34] *ibid* page 311
[35] See Appendix B for an explanation of *i*.

49) *Ausa tala paulu ei palea-si,   bisii moni adavu n-ei*
cloud big black 3s appear-PERF small LIM rain   IRR-3s

pu.
fall

A big black cloud has appeared so it will rain in a little while.

50) *A   gona eita   asu-asu ieli   a   bolo eili boa,* **maido**   **m-a**
NH place 1du.in go-RDP DEM NH pig exist none THE PRO and-NH

buse ei ma   mada-mada oto n-a   bolo.
dog 3s NEG bark-RDP   NEG PREP-NH pig

There are no pigs in this place where we have been, therefore the dog hasn't barked.

2.14 Grounds-EXHORTATION

"The **grounds**-EXHORTATION relation is most like the **grounds**-CONCLUSION relation, however in **grounds**-CONCLUSION the CONCLUSION is a statement and in **grounds**-EXHORTATION the EXHORTATION is always a command."[36] In Meramera no connective is used to indicate this relation. The **grounds**-EXHORTATION propositions can come in any order, as is shown in Examples 52 and 53.

51) *Asu u-luma   si-mon-moni-na, natu-mu   ei tang-tangi!*
go DT-house right_now- ?[37] child-2sPOS 3s cry-RDP

Go home now, your child is crying!

52) *A   oavi ei tun-tunu, ma   pige-pige lei!*
NH fire 3s hot-RDP NEG touch-RDP NEG

The fire is hot, do not touch!

53) *Ma   pige-pige lei   a   oavi, ei tun-tunu sele!*
NEG touch-RDP NEG NH fire 3s hot-RDP INTS

Don't touch the fire, it is hot!

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[36] *ibid* page 311
[37] The meaning of *simonmonina* is *right now,* however we are not sure how best to segment it. A possible way could be *si-mon- moni- na*
? -RDP- LIM- here

2.15 Condition-CONSEQUENCE

"The **condition**-CONSEQUENCE relation is also of the cause-EFFECT type. However, the cause, that is, the **condition**, is either hypothetical or there is some element of uncertainty."[38] In Meramera the **condition** proposition is always marked with the word *man-e/a* and it always precedes the CONSEQUENCE.

54) *M-i*   *man-e ei longe, ei n-i*   *vei maido,* "…..
    and-NEUT if-HM 3s hear 3s IRR-3s say thus

And if he hears (this), he will say thus, "…

55) ***Man-a s-in-obe***   *i buo mamau, bibi ue a*   *tavine n-e*   *su*
    if-NH NOM-sick[39] 3s big bad   man or NH woman IRR-HM 3du

mate.
die

If the sickness is too serious, the man or woman will die.

56) ***Man-e** o ani a*   *go-n-a*   *in-ani*   *pagu, n-a*
    if-HM 2s eat NH thing-POS-NH NOM-eat bad   IRR[40]-NH

tia-mu   *n-i*   *lasi.*
stomach-2sPOS IRR-3s ache

If you eat bad food, your stomach will ache.

57) ***Man-e** o ani pala mavo, n-o*   *ma*   *vitolo*   *oto seidei.*
    if-HM 2s eat first taro   IRR-2s NEG be_hungry NEG now

If you had eaten (the) taro, you would not be hungry now.

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[38] *ibid* page 312

[39] The stem *sobe* is nominalised by the infix *-in-*.

[40] This irrealis marker is optional because irrealis is already markers later on in the clause. Older speakers tend to include this marker and younger speakers tend to ommit it.

2.16 Adversative Constructions

The connective *gae*/*dae* is used when a speaker wants to express that the grounds proposition contains an undesired result. The grounds proposition always comes after the head or exhortation. In the following examples there is always an element of uncertainty and therefore the connective is followed by the irrealis marker *n-*. *gae* and *dae* are interchangeable, although older people tend to use *gae* and younger people *dae*.

58) *Bonu, ma   nga-ngala   lou   u-tano,   gae n-ea   ngala sobo*
    turtle NEG hold_breath-RDP NEG DT-down lest IRR-1s breath blocked

    a   dasi!
    NH   sea_water

    Turtle, don't hold your breath and dive down, lest I choke on the sea water!

59) *Su taboboli iiti   sele   a   luma, dae n-e   sou sanii sou ite.*
    3du cover   INTS INTS NH house lest IRR-HM 3pl some 3s   see

    They completely covered the house so that people wouldn't see.

3. Logical Relations at Discourse Level

At discourse level there are various connectives which are used: *seido, io*/*de, maido*/*maidolo*/*maido m-, tamai*/*golu tasa, moni*. We will discuss the use of each of these in the following pages.

3.1 The use of *seido*

Seido is sometimes used to mark an episode break or a change of development in a narrative text. We have no examples of *seido* being used at discourse level in our hortatory or instructional texts. In the following example, *seido* marks the start of a new development in the narrative. A group of men have been travelling up the river trying to find a pilot who has crashed. The point where the father suggests that they stop marks them arriving at the place where they will find this pilot.

60) *Sou vole   muli Padi u-oata n-a   lete-na.   **Seido***
    3pl paddle along **** DT-on PREP-NH head-3sPOS CON

   euma   vei maido, "N-eitou   manoa muga na."
   my_father say thus   IRR-1pl.in rest   first here

   They paddled along the Padi River, up to the river head. **And then** my father said, "Let's rest here first!"

Seido can also be used when there is a switch from background to foreground information, this can be seen in Example 61. In the preceding clauses the narrator explains how the village people presume that *Diaa* has died when in fact he has been swallowed by a giant fish. When the narrator switches back to the action, that is what the fish is doing, this is marked with *seido*.

61) ***Seido** taula   i somiale Diaa i mava-e[41]   ei iodo, ei*
    CON big_fish 3s feel   *** 3s heavy-TRANS 3s CIRC 3s

   vele u-lilo n-a   mado n-a   lolo-pat-pati   tasa.
   go   DT-in PREP-NH shore PREP-NH mountain-RDP-float one

   Meanwhile, the big fish, feeling the weight of Diaa inside of him, swam towards the shore of an island.

It is possible to indicate that an event is important by adding *-lo* to *seido*. *Seidolo* is used in a similar way to *seido*, but seems to have more weight. This can be seen in the following example. A big fish has been pursuing a young boy for a long time and finally the boy reaches some coral reef and the fish swims away. *Seidolo* marks the important event of the fish swimming away.

62) ***Seido-lo**   a aia taula do-lo   i veteliu u-lau.*
    CON-RDP[42] NH fish big   DEM-RDP 3s return DT-sea

   And finally the big fish returned to the sea.

Seido moni is almost always used at the end of a text; narrative, instructional and hortative, to indicate that the speaker or narrator has come to an end.

3.2 The use of *io/de*

io and *de* are interchangeable and the use of them depends on individual preference. They have a temporal element to them, often appearing before a time phrase, refer back to Example 1. It is also interesting to note that in some texts where time phrases

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[41] *mava-e* is a contraction of the underlying form *mavaa-e*
[42] See Appendix E for an explanation of the consonant shift which has occurred in the reduplication.

appear frequently *io/de* do not appear at all, so it would appear that the time phrases are replacing *io/de*. *io/de* are used to signal the start of a speech or a narrative and are also used to indicate a new topic in a speech or a new development in a story. Compared with *seido* which we described above *io/de* are used more frequently. They do not carry as much weight in meaning as *seido* does and appear within episodes, marking only a slight change in topic or development. They often seem to function as a breathing or pausing point.

63) *De,   ea kale n-a   lange-liu a   t-in-agu   n-e   Hideki*
    CON 1s want IRR-1s throw-back NH ask-NOM[43] PREP-HM *****

   usi-nani n-e   eitou.
   DT-here PREP-HM 1pl.in

   Now, I want to answer Hideki's question to us.

In the following example *de* is used to indicate a new development in a narrative. Two brothers are in their boat on the ocean and the younger of the two looks out to sea. In doing this action he sights a dangerous fish and the entrance of this fish marks the start of a new development in the story.

64) *De   bisii-sii   n-e   sulu, ve   n-i   gemu u-lau. Ei*
    CON small-RDP PREP-HM 3du   CON   IRR-3s see   DT-sea 3s

   ite sele moni a   aia taula.
   see INTS LIM   NH fish big

   Now, the younger of the two happened to look out to sea. He was surprised to see a big fish.

de/io can be used when a chronological list of events or actions is given. The subject does not need to remain the same. This can be seen in the following two examples. In Example 66 the clause marked with *io* could also be interpreted as a response to what happens previously.

65) *Su   vole   usi-no,   su ontola. De   sulu sali a   oaga u-oata.*
    3du paddle DT-there 3du anchor CON 3du pull NH canoe DT-up

   The two paddle there and anchor. And then they pull up the canoe.

---

[43] In this case the stem is *tagu* and this is nominalised with the infix *-in-*.

66) *Su   sivo   u-tano,   su   magili laelae*[44]
    3du climb_down DT-down 3du stand   on

    min-a   moe.   Io   tama-na   m-e   tina-na
    PREP-NH   pandanus_mat CON father-3sPOS and-HM mother-3sPOS

    su   vei   maido,
    3du say thus

    The two climbed down and stood on a pandanus mat. Then her father and mother said this....

It is worth noting that both *io* and *de* are used in leave taking. At the end of interaction, as a speaker is leaving he simply says "Io!" or "De!" according to his preference. The other person responds in the same way.

3.3 The use of maido/maidolo

maido/maidolo are usually used where a **reason**-RESULT relation is shown. At discourse level they sometimes occur towards the end of a section or a speech as a way of concluding the preceding information. They are normally followed by the conjunction *m-e/a*. The speaker gives lots of facts or information and then states what the consequence of these facts are or what these facts lead him to conclude. This is in the format *You have/haven't done this and this, so **therefore** these are the consequences.* This can be seen clearly in the following two examples. Example 67 appears at the end of a section where the speaker has been rebuking the village people for not helping with the work of Bible translation. In Example 68 *maido* appears at the start of the concluding paragraph of a speech exhorting people to get involved in Bible translation. As is discussed in footnote 9 *maido* has a semblative function and it typically stands in place of either the preceding clause or even the whole of the preceding sentence.

67) *N-e   amtou ite   tase moni a   muina,   **maido**   m-a*
    IRR-HM 2pl   look away LIM NH continually THE PRO and-NH

    vulo-vulo-na   sie.
    cease-RDP-NOM   DEM

    You continually ignore (the work of translating the Bible) and therefore it has come to a stand still.

---

[44] *laelae* has two meanings: either *to fear* or *on*. This latter meaning occurs very rarely.

68) **Maido**   **m-e**   *amiteu* *kak-e*[45]   *amtou*   *n-e*   *mu*   *buloi*
THE   PRO and-HM 1pl.ex ask-TRANS 2pl IRR-HM 2pl   2pl   help

sagali *e*   *amiteu.*
strong HM 1pl.ex

Therefore we urge you to help us more.

As seen above in the case of *seidolo, maidolo* although having the same function as *maido* is used when a more important conclusion is being made. Example 69 appears at the end of a narrative, the point of which is to explain where the people of Bali come from.

69) **Maido-lo**[46] *m-e*   *sou* *e*   *Bali,* *sou* *a*   *palea-n-e*   *sou*
THE PRO and-HM 3pl HM *** 3pl NH appear-NOM-HM 3pl

mai-nani *n-e*   *Lolobau.*
DA-here PREP-HM ******

And thus the people of Bali have their origin in Lolobau.

3.4 The use of *tamai/golu tasa*

Both *tamai* and *golu tasa* are used to connect units of discourse in the form of a list. *tamai* is used when an additional piece of information is being given, and serves to connect the two units of discourse.

70) *Ei* *n-i*   *ma* *gaga-ga*   *oto*   *sala.*   **Tamai** *ei* *n-i*
3s IRR-3s NEG wander-RDP NEG outside CON   3s IRR-3s

ma *avutu* *oto,* *n-i*   *ma* *siili*   *oto.*
NEG bathe NEG IRR-3s NEG comb_hair NEG

She should not wander around outside. Furthermore she should not bathe or comb her hair.

The following example illustrates a similar use of *tamai*, however it is not taken from a natural text, rather it is taken from a translation of a Shell Book.

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[45] *kak-e* is a contraction of the underlying form *kaka-e*.
[46] *maidolo* is a reduplicated form of *maido*.

71) *Ieli* **tamai**, *min-a*   *malada eitou da-dani*   *a*   *mauma,*
     DEM CON   PREP-NH day   1pl.in plant-RDP NH garden

     n-eitou   *buloi e*   *sou.*
     IRR-1pl.in help   HM   3pl

Furthermore when we plant a garden we should help them. (older people)

golu tasa is used when either a new topic is introduced or when more detailed information is given about what has come before. In Example 72 in the preceding text the speaker has been complaining about village people's reluctance to be involved in Bible translation. He then goes on more specifically to address older and younger men and as he makes this transition *golu tasa* is used. By using *golu tasa* the speaker is also putting emphasis on what he has to say.

72) *Golu tasa ei maido. Amtou vanua buo-buo n-a*   *aubu*   *pilu*
     thing one 3s thus   2pl   men   big-RDP PREP-NH village with

     e   *sele-banini ala-la-ba,*   *man-e*   *amiteu bili e*   *amtou a*
     HM KIN-small   young-RDP[47] when-HM pl.ex   give HM 2pl   NH

     lau-lau   *n-e*   *amtou toe-bi-le-lesi,*   *n-e*   *amtou ma goli*
     leaf-RDP IRR-HM 2pl   CAUS-straight-RDP[48] IRR-HM 2pl   NEG do

     ete.
     NEG

One problem is this, you older village people along with the younger people do not do anything when we give you a book to check.

As the speaker goes on to make a second point, about how the village people are only willing to work for money, *golu tasa lou* is used.

73) *Golu tasa lou*   *maido. Amtou damtale moni a*   *pipigo-na*
     thing one INTS thus   2pl   think   LIM NH work-NOM

     min-a   *guale-na*   *vatu*   *min-e*   *amtou oto.*
     PREP-NH earn-NOM money PREP-HM 2pl   REFL

Another problem is this, all you are interested in when you work is the money that you will earn.

---

[47] The stem is *alaba* and reduplication is marked by the infix *-la-*.

[48] The prefix *toe-* is the causative marker, the stem is *bilesi* and the infix *-le-* marks reduplication.

3.5 The use of *moni*

We would expect *moni* to indicate contrast at discourse level, as it does at sentence level, but we have found no examples so far to show this.

4.Conclusions

In this paper we have attempted to describe the different connectives used in Meramera to indicate logical relations. These are used in both spoken and written texts. We have discovered that several different connectives are used, both at clause and discourse level. However, it is not always necessary to use a connective to indicate a logical relation, sometimes the context provides enough information.

5. Bibliography

Fast, Lesley. 1997 *Logical Relations in Tungag Discourse* (ms. in archives at Ukarumpa library)

Johnston R.L. 1980 *Nakanai of New Britain: The Grammar of an Oceanic Language* Pacific Linguistics series B- No. 70: Australian National University

Larson, Mildred.L. 1984 *Meaning-based Translation: A Guide to Cross-language Equivalence* University Press of America: Lanham

Lowe, Ivan. 1999 *Discourse Manual* (PhD dissertation)

Ohtsuba, Hideki. 1996 *Meramera Grammar Essentials* (ms. in archives at Ukarumpa library)

Payne, Thomas.E. 1997 *Describing morphosyntax: A guide for field linguists* Cambridge University Press

6. Appendices

Appendix A

Negation in Meramera

1. Standard Negation

Two particles are used in Meramera to express standard negation. These are *ma* and *oto/ete* and appear before and after the verb respectively.

As can be seen in Example 1 *ma* V *ete* is generally used with transitive verbs, whereas *ma* V *oto* is generally used with intransitive verbs, see Example 2. There are some exceptions to this rule.

   1) *Ei **ma**   kale ete   eau.*
       3s NEG like NEG_TR 1s

       He does not like me.

   2) *Ei **ma**   mate oto.*
       3s NEG die   NEG_ITR

       It did not die.

2. Imperative Negation

Imperative negation is used in a similar way to standard negation. The two particles *ma* and *lou/lei* are used. These two particles appear before and after the verb and as in the case of standard negation a distinction is made between transitive and intransitive verbs. *ma* V *lou* is generally used with intransitive verbs and *ma* V *lei* is used with transitive verbs. See the following examples. As above there are some exceptions to this rule which cannot be accounted for.

   3) ***Ma**   pige-pige   **lei**   a   oavi.*
       NEG   touch-RDP NEG_TR NH fire

       Do not touch the fire!

   4) *O **ma**   lae-lae   **lou.***
       2s NEG be_afraid-RDP NEG_ITR

       Do not be afraid!

Appendix B

Meramera Personal Pronouns

Meramera personal pronouns are shown in Table 1. These forms occur both in subject and object positions. Listed in brackets are shortened forms for each pronoun. These mostly occur in subject position. Thus they could be marking the nominative case. More research needs to be carried out to ascertain whether this holds true or not.

Table 1: Meramera Personal Pronouns

	1	2	3
singular	eau (ea)	oo (o)	ei (i)
dual		amulu (amu, mu)	sulu (su)
dual incl.	eitau (eita, ta)		
dual excl.	amilu (ami)		
plural		amtou (amto, mu)	sou (so)
plural incl.	eitou (eito, to)		
plural excl.	amiteu (amite, te)		

Appendix C

Possession in Meramera

1. Inalienable Possession

In Meramera nouns are divided into two classes based on possession: those which are inalienably possessed and those which are alienably possessed. The following table shows inalienable possessive suffixes. The forms in bold are the forms which appear in this paper.

Table 1: Meramera inalienable possessive suffixes

	1	2	3
singular	*-gu*	*-mu*	*-na*
dual		*-neamulu*	*-nesulu*
dual incl.	*-neitau*		
dual excl.	*-neamilu*		
plural		*-neamtou*	*-nesou*
plural incl.	*-neitou*		
plural excl.	*-neamiteu*		

2. Alienable Possession

The following table shows alienable possessive pronouns in Meramera. Those forms in bold appear in this paper.

Table 2: Meramera alienable possessive pronouns

	1	2	3
singular	*minau*	*minio*	*minei*
dual		*mineamulu**	*minesulu (nesulu)**
dual incl.	*mineitau**		
dual excl.	*mineamilu**		
plural		*mineamtou**	*minesou (nesou)**
plural incl.	*mineitou (neitou)**		
plural excl.	*mineamiteu**		

*For ease of reading all of these forms appear in the examples in this paper as two words. (eg: *minesou* would read *mine sou*)

The forms which appear in brackets are contractions of the proper form.
These can easily be confused with the inalienable possessive suffixes in Table 1.
Although the surface structures of these contracted forms are identical to those in
Table 1 the underlying forms are different.

3. Possessive NPs

3.1 Inalienably Possessed Nouns

When the "possessor" of an inalienably possessed noun is a noun the affix *-n-* occurs
after the stem to indicate that the noun is possessed. The suffix *-e* or *-a* is then added.
When the possessor is HUMAN (mostly proper names and kinship terms) the suffix *-e*
is used. When the possessor is NON-HUMAN (other nouns) the suffix *-a* is used.
These suffixes are glossed as HM (human noun marker) and NH (non-human noun
marker) respectively.

	POSSESSED	POSSESSOR
1)	*natu-n-a*	*kuleko*
	child-POS-NH	chicken

The chicken's child

	POSSESSED	POSSESSOR
2)	*natu-n-e*	*Salemo*
	child-POS-HM	God

God's child

3.2 Alienably Possessed Nouns

Alienably possessed nouns function in a very similar way to inalienably possessed
nouns when their possessor is a noun. The preposition *min-* appears after the
possessed noun indicating that it is possessed. *min-* is then followed by the suffix *-e* or
-a. As in the case of inalienably possessed nouns *-e* comes before a HUMAN possessor
and *-a* comes before a NON-HUMAN possessor. See Examples 3 and 4.

	POSSESSED	POSSESSOR
3)	*luma min-a*	*bolo*
	house PREP-NH	pig

A pig's house

	POSSESSED	POSSESSOR
4)	*luma min-e*	*Michael*
	house PREP-HM	******

Michael's house

In many instances the preposition *min-* is contracted to *n-*, thus it would be possible to say:

luma n-a   bolo   or   *luma n-e   Michael*
house PREP-NH pig   house PREP-HM ******

This contracted form is used just as frequently as the full form and could be easily confused with the device used to mark inalienably possessed nouns.

Appendix D

The Particle *i*

In Meramera there is a particle *i* which occurs after the subject, after the verb or clause finally. We suggest that this particle has three different functions and outline these suggestions below.

i) *i* often occurs directly after the subject, particularly when it is phonologically long. We suggest that it is functioning as a 3rd person singular pronoun copy. See Example 1. The NP can also followed by a coreferential pronoun in 3rd person dual and 3rd person plural.

1) *N-a   malada tasa tama-n-e   sulu i mate.*
   PREP-NH day   one father-POS-HM 3du 3s die

   One day the father of the two died.

ii) *i* often directly follows the verb and can occur when there is an object, a complement clause or when there is neither of these. See Examples 2, 3 and 4 respectively. *i* occurs most commonly however between the verb and a complement clause. In most cases *i* is optional, with the exception of the verb *muada* which is normally followed by *i*. (see Example 2) We suggest that in these cases *i* is a 3rd person singular pronoun.

2) *Ea ma   muada oto   i.*
   1s NEG know NEG 3s

   I don't know!

3) *Ivu amulu n-e   mu inu i a   taogo   min-au..*
   truly 2du   IRR-HM 2du drink 3s NH container PREP-1s

   Truly, you will drink of my cup.

4) *O damu i ei a   doana obu ue boa?*
   2s think 3s 3s NH good tree or NEG

   Do you think it's a good tree or not?

We have found one example where *i* is used as part of an idiom. When the verb *saga* stands on its own it means *to be surprised* but when it is followed by *i* it means *suddenly*. See Example 5.

5) *Vele tase lei   a   malada sanii lou   **saga**   i ei tau*
    go   away INTS NH day   some INTS surprised 3s 3s put

    a   vua-vua-na
    NH   fruit-RDP-3sPOS

Some more days went by again and suddenly it bore its fruit.

iii) Sometimes *i* occurs clause finally. We suggest that in this position it is functioning as a relativiser, marking a relative clause which indicates time or location. See Examples 6 and 7 respectively.

6) *Amtou asu usi-nani mu guale a   aubu n-a   m-un-onge*
    2pl   go DT-here 2pl take   NH place PREP-NH rejoice-NOM[49]

    Euma   ei masusul-i[50]   m-ei vile-ale-si   min-e   amtou,
    my_father 3s prepare-TRANS and-3s choose-PERF PREP-HM 2pl

    n-a   ilala magamaga i palea alaba i.
    PREP-HM time ground   3s appear new   REL

You come here, you receive the place of rejoicing which my Father prepared and chose for you at the time when the earth was created.

7) *Amiteu vele usi-no   min-a   luma amiteu ngolo i.*
    1pl.ex run DT-there PREP-NH house 1pl.ex sleep REL

We traveled to the house where we would sleep.

iv) Other than the possibilities outlined above *i* could be a boundary marker for a preceding complex constituent as in Example 4. It could also be functioning as a topicaliser. This would be supported by Examples 1, 2, 10,13 and 16 in the main text.

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[49] This verb is nominalised by the infix *-un-* the stem is *monge*.
[50] *masusul-i* is a contraction of the underlying form *masusulu-i*.

Appendix E

Table 1: Derivational chart for Meramera demonstratives and circumstance markers.

	STEMS					
	DEM	(that, those)	DEM / CIRC	(that, those)	DEM	(this, these)
PHONE	*de-*	*de-le*	*do-*	*do-lo*	*li*	*li-li*
φ	*de* 635		*do* 995		*li* 211	
[e]	*e-de* 92	*e-de-le* 1	*e-do* 20		*e-li* 24	
[ei]	*ei-de* 19		*ei-do* 52	*ei-do-lo* 2		
[ie]	*ie-de* 172	*ie-de-le* 21	*ie-do* 556	*ie-do-lo* 20	*ie-li* 313	*ie-li-li* 36
[iei]			*iei-do* 7			
[io]			*io-do* 189	*io-do-lo* 15		
[o]			*o-do* 350	*o-do-lo* 33		
[ue]	*ue-de* 11	*ue-de-le* 2	*ue-do* 9		*ue-li* 16	

This table shows how the different forms used for demonstratives and circumstance markers in Meramera are derived. *de* and *do* and are used most frequently out of all of the forms and are the underlying form. The forms *dele, dolo* and *lili* are reduplications of the underlying forms. In the case of *dele* and *dolo* a consonant shift has occurred and *l* replaces *d* in the second syllable. (*dede* ⇒ *dele, dodo*⇒ *dolo*) Both the underlying form and the reduplicated form can be preceded by the phones listed in the table. More research needs to be carried out to ascertain whether the use of these is influenced by their phonological surroundings. Similarly, more research needs to be carried out to ascertain when the underlying form is used and when a reduplication is used. The numbers which appear in each section of the table show how often each form occurs within a corpus of 20 natural texts.

Appendix F

Intensifiers in Meramera

In Meramera there are several different adverbs of intensity each of which are used in different circumstances. In this paper we have glossed all of these as INTS. We list each of them below and give a description of how they are used.

iiti, palipali are used to indicate entirety. They could be glossed as *totally* or *completely* in English. Although they have the same meaning they are not interchangeable. The verb, adjective or noun which is modified dictates which of them is used.

    1) *Maubi-na   ei pulu **iiti**.*
       fight-NOM   3s finish INTS

       The fighting had completely finished.

    2) *Ei ani **palipali** a   popo.*
       3s   eat INTS   NH pawpaw

       He ate all of the pawpaw.

lou/lei are generally used when repetition or addition are indicated, so they could be glossed in English as *again. lou* is also used to indicate comparison, see Example 23 in the main text.

    3) *E   Ulevun ei lulu **lou**.*
       HM ****** 3s burn INTS

       Mount Ulawun errupted again.

    4) *Ei oole **lei**   a   tia-n-e   taula.*
       3s   cut INTS NH belly-POS-HM big fish

       He cut the belly of the big fish again.

paga is most often used to modify time phrases. It also sometimes modifies the verbs *oovu* (*uninhabited*) and *bualalo* (*deserted*)

    5) *Ei lae-si,   vu-na   **paga** lodo-si.*
       3s be_afraid-PERF reason-3sPOS INTS night-PERF

       She was afraid because the night had come.

6) *Aubu i **paga** oovu-osi.*
   village 3s INTS hide-PERF

   The village became completely deserted.

sele is used most frequently of all the intensifiers and can be used fairly generically. The English equivalent would be *very* or *indeed.* It can occur after another intensifier, see Examples 5 and 59 in the main text.

7) *Maido   m-a   buse i sinoa   **sele**.*
   THE PRO and-NH dog 3s be angry INTS

   So the dog became very angry.