Abstract: The range of linguistic structures and interactional practices associated with other-initiated repair (OIR) is surveyed for the Northern Australian language Murrinh-Patha. By drawing on a video corpus of informal Murrinh-Patha conversation, the OIR formats are compared in terms of their utility and versatility. Certain “restricted” formats have semantic properties that point to prior trouble source items. While these make the restricted repair initiators more specialised, the “open” formats are less well resourced semantically, which makes them more versatile. They tend to be used when the prior talk is potentially problematic in more ways than one. The open formats (especially thangku, “what?”) tend to solicit repair operations on each potential source of trouble, such that the resultant repair solution improves upon the troublesource turn in several ways.

Keywords: other-initiated repair; conversation analysis; semantics

By initiating repair on an interlocutor’s prior turn, speakers of the Australian Aboriginal language Murrinh-Patha seek to manage slips in intersubjectivity. The various formats for Other-Initiated Repair (OIR) act as pointers to likely trouble sources and possible trouble types. These trouble types might relate to audibility, speech production, or, with understanding what has been articulated. Some OIR formats are quite specialized whereas other formats are more versatile. Whatever the repair initiator (RI), the trouble source producer must consider the format of the initiator in the light of the interactional alignment of co-participants, so as to decide which repair operations are required to fix the particular problems that rendered their prior turn inadequate.

The analysis undertaken here is interdisciplinary. For the most part, this paper applies the qualitative methods of conversation analysis. However, these analyses have been augmented by quantitative methods that utilise a modified version of the coding scheme included in this special edition (Dingemanse, Kendrick, and Enfield forthcoming). Certain coding questions have been adapted following qualitative analyses of several extracts. There is thus feedback between these methodological approaches. These quantitative analyses give a measure of how certain formats tend to selectively target particular repair operations while other formats show more versatility.

1 The Murrinh-Patha language

Murrinh-Patha is a lingua franca spoken by approximately 2700 people in Wadeye, Nganmarriyanga and in various smaller communities within the Fitzmaurice and Moyle Rivers’ region of Australia’s Northern Territory. It is spoken by people affiliated to the Murrinh-Patha, Marri Ngarr, Marri Tjevin, Marri Amu, Magati Ke, Ngan’gityemerri and Jaminjung languages, who prior to the 1950s, would have been multilingual hunter-gatherers. Today all Aboriginal people in this region speak Murrinh-Patha natively on a daily basis. It is one of only 18 traditional Australian languages still being acquired by children (AIATSIS 2005, 3). Until they encounter English at school, most children in Wadeye grow up as monolingual Murrinh-Patha speakers (Kelly, Nordlinger, and Wigglesworth 2010). Murrinh-Patha is a polysynthetic language that exhibits both
fusional and agglutinating morphology. Syntactically, it is head-marking with quite free word order (Walsh 1976; Blythe 2009a; Nordlinger 2010; Mansfield 2014). All nouns belong to one of ten nominal classes (Walsh 1993; 1997), which, not being genders, do not form the basis for verbal inflection. Each nominal class has a dedicated content question word that allows speakers to ask about entities belonging to those categories (see §4.1.1). Widespread name avoidance hugely complicates reference to persons (Blythe 2009a; 2009b; 2013) so other initiation of repair plays an important role in dealing with these complications.

Figure 1: The Fitzmaurice and Moyle Rivers region of Australia’s Northern Territory.

2 Data collection and corpus

The corpus on which this work is based was constructed in accordance with a set of guidelines developed by the members of the comparative project being reported on in this special issue (see Dingemanse & Enfield 2015 for further information). Here are the key properties of the data:

Table 1: Key properties of the data collected for the studies in this issue

- Recordings were made on video.
- Informed consent was obtained from those who participated.
- Target behaviour was spontaneous conversation among people who know each other well (family, friends, neighbours, acquaintances), in highly familiar environments (homes, village spaces, work areas).
- Participants were not responding to any instruction, nor were they given a task—they were simply aware that the researcher was collecting recordings of language usage in everyday life.
- From multiple interactions that were collected in the larger corpus, the selection for analysis in this study was of a set of 10-minute segments, taken from as many different interactions as possible (allowing that some interactions are sampled more than once), to ensure against bias from over-representation of particular interactions or speakers.
Of the seventeen Murrinh-Patha interactions sampled in this study, thirteen were collected by the author between 2007 and 2012 and four were collected in 2012 by John Mansfield. The recordings were made either in the communities of Wadeye, Nganmarriyanga, or on the estates of one of the local clan groups. Between 5 and 25 minutes were sampled from each interaction, totalling 3 hours and 53 minutes of conversation. This provided 147 cases for the core collection of other initiations of repair in Murrinh-Patha.

3 Sequential structure and OIR

3.1 Minimal OIR sequence

In the canonical OIR sequence, the existence of a problem becomes public in middle turn of the sequence (T0), as Extract 1 demonstrates. At T0 speaker B produces something (in this case, it is the content question word *nangkal*, “who”, at line 5) which alerts the previous speaker (A) to a problem with his/her previous turn (T-1), or part thereof. At the following turn (T+1), A attends to the issue, by repairing what he/she assumes to be the problem. In this case, A calls out to a group of women, summoning one of them with the 2nd person singular inflected verb *thurrumaniyethu*, “come here will you” (line 3). At T+1 (line 7) *nyinyi nyinyi*, “you, you”, specifies the previous speaker, B, as the target of the intended summons.

Extract 1: Dingalngu 20110730_JB_video_GYHM100_04_344960

1 A ↑YAWU kardu thurduriyitjmani kagawu!↑
   Yawu kardu thurdu -riyitj -mani kagaw
   Hey! NC:HUMAN 2SG.S.29.FUT -explain -try_to come_here
   Hey!! Can you come here and explain (to her).
2 (1.5)
3 A thurrumaniyethu. T-1
   thurru                    -mani     -gathu
   2SG.S.go(6).FUT -be_able -HITHER
   Come here will you.
4 (0.6)
5 B nangka:l; T0
   who
   Who?
6 (0.2)
7 A nyinyi INYinyi. T+1
   2SG 2SG
   You, you!
8 C  1nyinyi.
    2SG
    You!

3.2 Non-minimal OIR sequences

Sometimes a single repair initiator does not adequately resolve the problems with the T+1 turn and an extended sequence comprised of chained three-turned sequences emerges. This can also happen when the provided repair solution brings new sources of trouble. Alternatively, the RI itself can be problematic and interlocking OIR sequences can emerge.1 Extract 2 exemplifies the initial situation where the first

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1 *Thurrumaniyethu* in line 3 is a second summons – a pursuit of the initial summons in line 1. The group of women that A is calling out to, although seated nearby, is obscured by a parked vehicle.

2 74 of the 147 repair initiators in this Murrinh-Patha collection (50%) occur in non-minimal sequences.
repair solution proves inadequate and a second RI pushes for a fuller understanding of the previous repair solution. As is typical of these extended sequences, the repair initiations show a narrowing of domain, in this case it is from an ‘open’ interjection to a more restricted ‘candidate understanding’.

In Extract 2, Peggy is recounting how a group of young girls survived a nearly disastrous boating mishap. In line 1 she mentions that a particular girl collapsed on the beach (having been washed up on the shore). Gracie (at line 3, and in overlap with Peggy’s line 4) makes a contribution to the telling that sees Peggy suspend what she is saying and turn to face her. Gracie has a speech disorder (spasmodic dysphonia with tremors) which makes her difficult to understand. She normally produces multisyllabic words as discrete breathy syllables, as is the case here.

**Extract 2: Da Ngarne 20091121JBvid03_726920**

1. Peggy  ngarra darrimurn damatha ba- (0.2) bammat,↑  
LOC sand INTS STRI 3SG.S.18.NFUT -fall
Right on the sand, she- (0.2) she fell down.
2. (1.2)
3. Gracie  ngen nyind-a- thu- (0.2) yit- tjit; T-1
ngen nyinda-gathu yittjt
flesh ANAPH-FOC heavy
She was overweight.
4. Peggy  [(wurdan- )] (She- ) ((turns to face Gracie))
5. (0.5)
6. Peggy  Aa? T01
OIR.INTJ
Huh?
7. (0.4)
8. Gracie  Ngen T+1, T-1
flesh
9. (1.4)
10. Mabel  ngen ngalla; T02
ngen ngalla
flesh big
fat body?
11. (0.3)
12. Gracie  ((holds hands apart facing each other)) T+1
13. Peggy  Na::;
Na
TAG
Really?
Gracie’s stilted description of the girl’s physique as overweight (*ngen nyindathu yittjit*, literally: “that heavy flesh”, line 3) is the first T-1 turn. When Peggy initiates repair (*Aa?*, “huh?”, line 6), at line 8 (T+1) Gracie repeats only the initial word *ngen* (“flesh”) which had previously been produced in overlap. The second repair initiation (T0) is co-present Mabel’s offer of a candidate understanding (*ngen ngalla*, “fat body?”) at line 10. Gracie confirms this to be the correct understanding by demonstrating gesturally, with both hands, that the girl in question was not thin (line 12). Although the RIs at lines 6 and 10 move from more open to more restricted3, the repair solutions here become progressively more reduced than the initial trouble source turn (T-1). This reduction of articulated material (seven syllables > one syllable > demonstrative gesture) is to be expected from someone whose vocalizations are produced under considerable strain.

Another type of non-minimal sequence is where an initial RI fails to secure repair, such as the overlapped interjection *Aa¿* at line 6 of Extract 3, and a second initiator is produced which targets the same trouble source turn as the first one (as in line 8). In these cases, [T-1, T0, T+1] is considered to be a complete OIR sequence, whereas [T-1, T0] is sequentially incomplete. (Incomplete sequences will be excluded from any counts relating to solicited repair operations).

Extract 3: Da Ngarne 20091121JBvid03_1226536

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
</table>
| 1 | Peggy | -kardu mamay damanangadha [mut] muttjeya<
   |     | kardu mamay daman -ngadha mutmut -ye =ya NC:HUMAN young_child just -still ignorant -ear =CL
   |     | He was still just a little boy, he didn’t understand much. |
| 2 | Lily | [Mm.] |
| 3 | Peggy | one ma:as; (1.0) An one silly billygoat bin de;;;=mam, |
   |     | one mast and one silly billygoat bin there mam |
   |     | one mast and one silly billygoat be.PST DIST 3SG.S.34say/do.NFUT |
   |     | “(the boat had) One mast, and there was one silly billygoat”, he said. |
| 4 | Mabel | ha ha [ha ha] mhmm |
| 5 | Peggy | [ha ha ha] ha |
| 6 | Gracie | [ Aa¿ ] |
   |     | OIR.INTJ |
   |     | Huh? |
| 7 |   | (0.2) |
| 8 | Gracie | Aa¿ |
   |     | OIR.INTJ |
   |     | Huh? |
| 9 | Peggy | Aha one silly billygoat bin de;;;=*mam;* |
   |     | Aha one silly billygoat bin there mam |
   |     | laugh one silly billygoat be.PST DIST 3SG.S.34say/do.NFUT |
   |     | “And there was one silly billygoat”, he said. |

4 Formats for other-initiation of repair

In this section, I survey forms that speakers of Murrinh-Patha use for initiating repair in the T0 position. Our interest is not only in the specific linguistic resources that are used for formulating other-initiation of repair, but also the contextual principles for selection of one type of form over another, and the kinds of functional outcomes that each type of form can have (that is, the repair operations that the forms elicit in T+1).

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3 The movement here reflects the “natural ordering” along the dimension of “relative ‘strength’ or ‘power’” that RIs have “to locate a repairable” (Scheffloff, Jefferson, and Sacks 1977, 369; Sidnell 2010, 253) (cf. Dingemanse, Blythe and Dirksmeyer (2014) for additional dimensions of variation).
We distinguish the following main types of repair initiator (see Dingemanse & Enfield 2015):

Table 2: Some basic format types for other-initiation of repair

<table>
<thead>
<tr>
<th>Type</th>
<th>Subtype</th>
<th>Frequency (n/147)</th>
<th>Proportion</th>
</tr>
</thead>
<tbody>
<tr>
<td>Restricted</td>
<td>Request (seeking specification)</td>
<td>48</td>
<td>33%</td>
</tr>
<tr>
<td></td>
<td>Offer (seeking confirmation)</td>
<td>48</td>
<td>33%</td>
</tr>
<tr>
<td></td>
<td>Alternative question</td>
<td>0</td>
<td>0%</td>
</tr>
<tr>
<td>Open</td>
<td>Interjection</td>
<td>35</td>
<td>24%</td>
</tr>
<tr>
<td></td>
<td>Question-word</td>
<td>8</td>
<td>5%</td>
</tr>
<tr>
<td></td>
<td>Formulaic</td>
<td>0</td>
<td>0%</td>
</tr>
</tbody>
</table>

In the following section I diverge from the ordering adopted by the other papers of this special issue by discussing the restricted formats before the open formats. I think it is important to understand the operations of the more specialised restricted formats – how they target certain types of trouble sources and how they restrict the problem space – before examining the operations of the non-specialist open formats. It is easy to underappreciate all-round tools (like a good set of multigrips) before realising that specialised tools (e.g., canvas pliers, crimping pliers, circlip pliers, forceps, wire strippers, etc.) aren’t versatile enough to perform a wide range of fixes. The restricted RI formats are more precise tools than the open RI formats, but the open formats are versatile tools that can attend to talk that is problem-laden in several ways.

4.1 Restricted formats

All initiators of repair are formulations for interrogating prior talk (Dingemanse, Blythe, and Dirksmeyer 2014). They enable recipients to ask prior speakers what they just said, about what they meant, or about who the utterance was intended for, etc. Restricted RIs draw on language-specific resources for question construction. As such, those RIs that restrict the domain of inquiry to recognizably salient socio-semantic categories tend to be built around content question words. Those that offer candidate understandings for confirmation or disconfirmation are built as polar questions. Alternative questions can also service as RIs although none have emerged in this Murrinh-Patha collection.
4.1.1 Request subtype – the category specific repair formats

53% of the restricted RIs exploit recognizable socio-semantic categories so as to classify trouble source items and potentially locate them. They normally use content question words to do this. Thus RIs built around the interrogative nangkal “who?” make clear that the trouble source is a person reference item; which is not to say that nangkal necessarily pushes for referential specification, although it usually does. RIs built around the question word ngarra “where?” make it clear that the trouble relates to a place reference item, but this does not guarantee that the predominant issue will be location identification or wayfinding.

Content questions characterize troubles as intersecting with the categorial domain of the content question word, which, by manner of inference, can be used to locate referential expressions of the relevant domain. Ultimately trouble source producers must infer from what has been produced within the T0 turn, and from the goings-on in the vicinity of the T-1 turn, which items within T-1 might be problematic and what sort of issues they might point to.

A factor complicating person reference in Murrinh-Patha is the widespread avoidance of certain personal names. Speakers avoid naming the recently deceased, certain in-laws and siblings, especially opposite sex siblings. Despite this, names (when unencumbered by prescribed taboos) are the default means for introducing new persons into conversation (Blythe 2009a; 2013). In Extract 4 Mary avoids mentioning her classificatory sister by name.4

**Extract 4: Da Ngarne 20091121Bvid03_613780**

1 Mary nigunuka puleka panguwa na°dh°adini; (0.9) muniwingkarledgerwurrini; (0.2)
nigunu-ka pule -ka pangu -wangu -wa na =dha=adini
3SG.F -TOP esteemed -TOP DIST -direction -EMPH 3SG.S.7go.PIMP -PST =3SG.S.1sit.PIMP
muni -wingkarle -dha=wurrini
3SG.S.11.PIMP-change_direction-PST=3SG.S.6go.PIMP
*The lady was going that way (0.9) she was changing direction (0.2)*
((points high northwards, sweeping point northwards))

2 ngarra dewinhattha marda nganangurr warda wangu. T-1
ngarra de -winhat-tha marda_nangan_gurr warda wangu
who/where 3SG.S.22have.PSTIRR-run -PST middle_of_sea TEMP direction
and then she started heading out into the middle of the ocean.
((raised whipping point northwards))

3 (1.1)

4 Rosa nangkalyu;
 nangkal =yu
who =CL
who?
(0.6)

5 Mary pule- (1.2) [Ma- (0.3)] Margie kalekale=
pule ma margie kale -RDP
esteemed STRI woman's_name mother-RDP
*The lady, Ma- Margie’s own mother*

6 Gracie [xxxx xxxx] [xxx xxxx]

7 Lily =yukuy;
yukuy
that's_right
That's_right.

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4 Although same sex siblings are free to refer to each other by name, they tend not to address each other by name, and generally prefer other (non-name) strategies for third person reference within informal conversation.
In the above extract Mary is recounting the previously mentioned boating mishap. At lines 1 and 2 she makes an initial reference to a then-young girl (now an old woman) being washed out to sea. Rosa’s person-specific RI nangkalyu (“who”, line 4) targets nuguru pule, an expression built out of a free pronoun nigunu and the term pule which conveys certain seniority/respect. At line 6 Mary repeats pule but then (after a false start) restarts with a kinterm that is anchored to her daughter (Margie kalekale, “Margie’s own mother”). At line 8 Lily (who was present at the said event) ratifies the kin-based formulation as appropriate.

Although the restricted OIR format nangkal makes evident that the trouble source item belongs to the domain of “persons”, it does not guarantee that person identification is the issue to be dealt with. In Extract 5 nangkal deals with an audibility issue.

**Extract 5:** Nanthak 20110828_JB_video_GYHM100_02_1215150_1222380

1. Agnes  
   <thungku thungku thungku;>  
   NC:FIREFIRE FIRE FIRE  
   “fire fire fire”  
   (0.5)

2. (0.5)

3. Agnes  
   lí ku tjepeni ngamar wurrun ngarrumardawitjkathu=  
   T1  
   ku tjepeni ngamar wurrun -ngarra -mardawitj -gathu  
   NC:ANM Japanese 1PL.S.34say/do.NFUT 3SG.S.6Go.NFUT-1PL.INC.IO -ascend -HITHER  
   We [thought] the Japanese had come up on us ha ha

4. Lily  
   [(Bere nuddamkathutthutngimeya)]  
   Bere nuddamka -thutthut-ngime =ya  
   Right 2DU/PC.S.30.NFUT-descend-PC.F.NSIB=CL  
   (right you all went down),

5. Agnes  
   =ha ha ha ha ha ha

6. (1.7)

7. Lily  
   nangkalyu::.  
   T0  
   nangkal=yu  
   who =CL  
   who?

8. (1.0)

9. Agnes  
   ku ngamamkangime ku tjepenimanawarda wurranngarrumardawitjkathungime;  
   T+1  
   ku ngamamka -ngime ku tjepeni -mana -warda  
   NC:ANM 1DU/PC.S.34say/do.NFUT -PC.F.NSIB NC:ANM Japanese -INTENS-TEMP  
   wurran -ngarru -mardawitj-gathu -ngime  
   3SG.S.6Go.NFUT-1PC.INC.IO -ascend -HITHER-PC.F.NSIB  
   At the time we [thought] the Japanese had come up on us.

10. Lily  
   |yukuy.  
   Yes  
   Yeah

In Extract 5 Agnes recounts hearing the horrified cries of children alerting a group of adults on the beach that a young boy’s clothes had caught fire. Although part of Agnes’ line 3 is overlapped by talk from Lily (at line 4), wurranngarrumardawitjkathungime (“they came up upon us”) is produced in the clear. Thus when Lily initiates repair with nangkalyu (“who”), it targets the barely audible person reference, ku tjepeni (the Japanese) which had been produced in overlap. At T+1 the repair solution reproduces the overlapped person reference item. In fact the entire T-1 turn is repeated (with some modification) at T+1. We frequently encounter this type of repair operation for open initiators like Aa? (“Huh?”), which are regularly deployed

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5 As non-Aboriginals, Japanese people take the “animate” ku class, rather than the “human” kardu class. The 3rd singular subject of wurranngarrumardawitjkathungime makes this non-recognitional collective singular reference to “the Japanese” an allusion to the 1942 Japanese air raids on northern Australia.
when audibility is an issue. Here the person-specific RI, *nangkal* is interpreted in the light of the Lily’s simultaneous talk as not seeking a specification of reference (despite specializing in this particular repair operation), but instead soliciting repetition of the overlapped material that ought to have included a person reference item.

Although *nangkal* (“who”) and *ngarra* (“where”) seek out category specific items as trouble sources, repair operations can also tackle issues pertaining to other categorical domains such as time or reason. In Extract 6 Bruce had been telling Dave and Dom about a cross-country bicycle ride to “old mission”. At line 4 Dave asked Bruce if it takes about half an hour to get there by bike, which Bruce confirms (at line 6) to be a fair estimation. At line 8, Dom uses the place-specific RI *ngarrawangu* (“where to?”) to enquire as to the destination implied at line 6 (T-1), but not overtly expressed. The provided repair solution “the shortcut to old mission” reveals not merely the destination (which was previously expressed in line 1) but also the non-standard route (a shortcut through the bush, rather than along the main road), which partly justifies the inquiry about the required travelling time.

**Extract 6: Ngandimell 20120715_JB_video_GYHM100_02_765228**

1 Bruce ngethe na rait ngurrinidha (0.4) wulmitjin (.) ngamburraruyngime (0.3)
   ngatheyida na rait ngurrini -dha wulmitjin for_a_while TAG right 1SG.S.6go.PIMP -PIMP old_mission
   ngam -wirra -ruy -ngime 1SG.SB.poke(19).NFUT-3PL.IO-arrive-PC.F.NSIB
   I was going right, you know, I came out where they were at at old mission,

2 Bruce [(headpoint NE)]
3 werrekimap pardedhangime werreki -map parde -dha -ngime
   woman’s_nickname-mob 3DC.S.4be.PIMP-PIMP-PC.F.NSIB
   werreki’s family was there.

4 Dave burrk batjingkul lilbit hafana thanamut
   burrk batjingkul lilbit hafana thana -mut lovely_bicycle little_bit half_an_hour 2SG.S.24slash.RR.PIMP-give
   Did it take you a good half hour on the bicycle?

5 (0.3)

6 Bruce hafana thanamut
   hafana thana -mut half_an_hour 2SG.S.24slash.RR.PIMP-give
   It takes you half an hour

7 4 (0.7)

8 Dom [ngarrawangu?]
   ngarra-wangu where -away which way?

9 Bruce [xxxxxxxxxxxx]

10 (0.3)

11 Bruce wulmitjin tjutkat nawa
   wulmitjin tjutkat na -wa place_name shortcut TAG -EMPH
   The shortcut to old mission, you know?

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6 As Bruce pronounces the placename *wulmitjin* (old mission) he head-points in the direction of the location being referred to (northeast). So doing, he turns his head away from Dom (who is seated immediately to the west of Bruce), thus reducing Dom’s ability to hear his articulation of the placename.
Just as languages vary in how many ways they classify the world of entities (e.g., persons, places, animals, plants, concepts, etc., and things), they also vary in how many ways those entities can be enquired about (Cysouw 2004a; 2004b; Mackenzie 2009; Mushin 1995). An indigenous system of classifying the world is reflected grammatically in Murrinh-Patha’s system of noun-classes (see Table 4). So that all entities may be incorporated, there is a nandji “residue” class of “things” (anything that is not kardu, ku, mi, tju, etc.). Note that nine of the listed content question words are built around the base form thangku (“what”). In English what is used to ask about things. When it comes to repair initiation, languages such as English, German and Korean use the upward intoned what? (or equivalents) as open RIs while the downward intoned counterparts are used for restricted repair (that is, for inquiries specific to “things”) (Schegloff 1997; Kim 1999; Egbert, Golato, and Robinson 2009; Selting 1987). Because the question word thangkurnandji targets the residue class “things”, the base form thangku does not require intonation to demarcate between open and restricted repair initiation. In Murrinh-Patha the open RI thangku typically has falling final intonation, which is the normal contour for both content questions and polar questions.

Table 4: Murrinh-Patha’s 10 nominal classes and some content question words specific to those classes.

<table>
<thead>
<tr>
<th>Noun classifier</th>
<th>Categorial domain</th>
<th>Corresponding question words</th>
</tr>
</thead>
<tbody>
<tr>
<td>kardu</td>
<td>humans: living Aboriginal humans</td>
<td>nangkal, nangkalardu</td>
</tr>
<tr>
<td>ku</td>
<td>animates: includes also non-Aboriginal humans, deceased</td>
<td>thangkugu</td>
</tr>
<tr>
<td>mi</td>
<td>Aboriginal humans, meat, money, etc.</td>
<td>thangkumi</td>
</tr>
<tr>
<td>tju</td>
<td>strikers: clubs, playing cards, lightning</td>
<td>thangku tju</td>
</tr>
<tr>
<td>thamul</td>
<td>spears</td>
<td>thangku thamul</td>
</tr>
<tr>
<td>thungku</td>
<td>fire: coals, guns, matches, firesticks, etc.</td>
<td>thangku thungku</td>
</tr>
<tr>
<td>kura</td>
<td>water: fresh water, water sources</td>
<td>thangku kura</td>
</tr>
<tr>
<td>murriny</td>
<td>speech, language, stories</td>
<td>thangku murriny</td>
</tr>
<tr>
<td>da</td>
<td>place and time</td>
<td>ngarra (where), mindjire (when), thangkurda (where/when)</td>
</tr>
<tr>
<td>nandji</td>
<td>residue: body parts, sea water, trees, non-indigenous paraphernalia</td>
<td>thangkurnandji</td>
</tr>
</tbody>
</table>
Mike: na.
TAG
Really!

Carol: nganaka ranger himself wurrinidha.
you_know? ranger him/herself 3SG.S.6go.PIMP-PIMP
She herself was a “ranger”

Agnes: ngarra weyi kardirdi mebert;
LOC hole 3SG.S.4be.PIMP -put_in 3SG.S.9snatch.PIMP -arm -get/take
Into the {snake} hole, she used to put her hand and grab {it/them}.

Mike: thangkugu.
what-animate?
what thing of the animate ku-class?

Agnes: ku tharringkin
NC:ANM king_brown_snake NC:ANM
king brown(s)

Carol: ku deadly snake panaya
ku deadly snake pana=ya
NC:ANM deadly snake RECN=CL

Laura: ku ngerri ngalla.
NC:ANM ornamental_cicatrice big
king brown(s)

While Agnes in line 1 tells Mike that Maggie had been bitten by snakes on numerous occasions, Carol (at line 2 and in overlap with Agnes) informs Mike that Maggie used to pick up dangerous snakes, which Mike acknowledges as noteworthy (line 4). At line 6 Carol likens Maggie to the indigenous rangers (well regarded for their bush-skills). At line 8 Agnes states that she used to put her hand into snake holes and grab the snake(s). At line 10 Mike uses the ‘what-animate’ interrogative thangkugu to initiate repair on the prior turn. Agnes’ reference to the ‘hole’ weyi (line 8) does not include an animate ku-classifier. That the hole belonged to a deadly snake is merely implied (i.e. it is zero-referenced at line 8). Thangkugu thus pushes for elaboration of the nominal ku-class entity overtly expressed in line 2 as ku pangkuy murlak ‘long dangerous animate’ (normally understood as a variety of venomous snake). The full gravity of the danger is revealed in at line 12 when Agnes expands on the snake variety by overtly naming ku tharringkin the ‘king brown’ (Pseudechis australis), which, by a different name, is also confirmed by Laura at line 15. The specification elaborates the more generic references to long dangerous snakes (ku pangkuy murlak, line 2) that had twice

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7 Pseudechis australis is greatly feared because it is extremely venomous, very long and very aggressive. It is known to stand on its tail and strike repeatedly, and even to bite people who are sleeping (Nambatu et al. 2009; Rasavi et al. 2014).
been overlapped by Anges’ simultaneous speech in line 1.

By exploiting the noun-class system, *thangkugu* points back to prior anaphors of the relevant noun class, so as to enquire about the referent. In fact, any format that adds semantic information (whether lexically or morphologically) to the base form *thangku* sheds some light on how trouble sources are problematic for RI producers. We might think of this group “*thangku*+” (i.e., *thangkugu*, “what animate?”, *thangkumi*, “what vegetable” *thangkunu*, “what for?”, *thangkudha*, “what’s wrong?”, etc.) as a ‘superordinate’ collection of specialised restricted formats. They all tend to push for some sort of specification or explanation as repair operations (although not exclusively), but each zooms in on their categorial domain of specialisation (i.e., *animates*, *vegetables*, *reasons*, *incidents*, etc.). By contrast, the bare form *thangku* is an open RI. Without the extra semantic information *thangku* is non-specific, which is what makes it so versatile. Below, when we perform a quantitative analysis of repair operations (in §4.2.4), we’ll see that *thangku* solicits specifications and elaborations almost as frequently as the *thangku*+ group, but at the same time attends to other issues that might also be potentially problematic.

### 4.1.2 Offer subtype of restricted format (candidate repair initiation)

The offer subtype, or candidate repair formats (Schegloff, Jefferson, and Sacks 1977; Dingemanse, Blythe, and Dirksmeyer 2014) are those that seek confirmation or otherwise of a possible understanding of the T-1 turn (or items therein), or a possible hearing of a partially audible trouble source item. Confirmations are normally done with an affirming interjection (e.g., *yu*, “yes” or *yukuy*, “that’s right”), a nod, and/or by repetition of the offered candidate. Disconfirmations are normally done with the interjection *awu* (“no”), followed by an explanation to the contrary.

Despite having 47 complete candidate sequences in the collection, no clear lexical or morphosyntactic resources have been identified for cuing candidate repairs (e.g., *ya mean*, or *did you say X?*). In fact, polar questions are not lexically or morphosyntactically distinguishable from declaratives. I have not yet ascertained whether prosody is implicated in cuing candidate repair initiation, although intonation and/or final lengthening perhaps play a role. Candidate repair initiations, and polar questions more generally, have falling intonation contours (like content questions and most declaratives). My working hypothesis is that although the final boundary tone is falling, it generally does not fall to the very base of the individual speaker’s register range. It is thus falling but not fully falling. By contrast, affirming and disaffirming responses are more likely to have low boundary tones. They tend to fall nearer to the speaker’s register base.

**Extract 8:** Thuykem 20110901_JB_video_GYHM100_02_595664

1. Phillip  karduka murrinh damatha nguddamnayitjnganamka kanyi ne;
   kardúka murrinh damatha nguddam -na -yitj=nganamka
   NC:HUM NC:SPEECH INTS INS.EX.S.30shove.NFUT-3SG.M.IO-tell=1PC.S.4be.NFUT
   kanyi na PROX TAG
   We brothers are speaking for his benefit here, hey! ...

2. Dave Mm | hm.

3. Phillip  bematha dayu mange ngarra penime pirrimnangerren (0.2) damkardutjim.  T-1
In Extract 8 Phillip and Dave are seated on the top of a hill. When I made this recording, Phillip and I had only just met but Dave I had recorded previously. In lines 1 and 3 Phillip remarks that they are speaking in the same location as another group of men in a video I had recorded a week earlier. In two verb forms (nguddamnayitjnganamka, line 1, and pirrimnangerren, line 2), Phillip uses the bound indirect object pronoun –na to cross-reference me as the beneficiary of the recording. In the first of two candidate RIs (line 5), Dave combines an anaphoric demonstrative (inda) with a masculine free pronoun (nukunu, “he”) to offer a minimally specified candidate, “that previously mentioned bloke”. This candidate is downward intoned (terminating at 107 Hz), but does not reach Dave’s register base of around 81Hz (and hence is transcribed with a semicolon). Phillip’s attempt to elaborate the referent is hampered by a name retrieval issue (nan, “what’s name”, in line 7). Dave offers a second candidate at line 9. The name Joe; is also downward intoned, terminating at 103 Hz, again short of Dave’s register base. Phillip’s affirmation token yu. terminates at 75Hz, which is his register base.

A recipient tilted epistemic gradient (Heritage 2010; 2013) is certainly a cue for candidate RIs. As current speakers, trouble source producers understand what they are intending to say better than recipients. With essentially declarative lexicomorphosyntax, Murrinh-Patha candidate RIs are B event statements that serve as questions (Labov and Fanshel 1977) (see also Bolinger 1957; Pomerantz 1980; Heritage 2012; 2013). With candidate repair initiation, RI producers offer an item that is ostensibly of the same socio-semantic category as an item produced in the previous turn (e.g., a person reference, a place reference, a predicate), such that it should be understood as a possible replacement for the prior item. Although inclined epistemically towards trouble source producers, candidate RIs are less steeply inclined than other RI formats because they make clear that a problem of a particular type has been registered, and that a potential solution is at hand. This reveals the RI producer to know at least something about the T-1 turn (unlike the open formats).

Because almost any sort of understanding might need confirmation, candidate repairs are useful for handling complications relating to the domains of place and person, such as person identification when name avoidance is an issue. In Extract 9 Agnes recounts how, some years ago on the beach where she is seated, a young boy suffered burns on his back. She avoids the boy’s name as he is her classificatory brother.

11 The claim relates to current speakers having privileged access to their own thoughts. This is irrespective of whether their thoughts have any real world validity.
At line 1 she states that the child’s maternal grandmother had been there as well (kawukawu wun’guka deninginthadha). At line 3 Lily initiates repair with a person specific RI built around the interrogative nangkal “who?”. Nangkalniminkama Alberta? (“Who exactly Alberta?”) asks both for a precise specification of the referent and offers a possible candidate for confirmation. Agnes disconfirms the candidate (Awu, “no”, line 5) and attempts to specify the child by triangulating through the mother. However, her attempt is hampered by a name-retrieval issue (kardu wakal nan nigurnuya is literally “the child of what’s her name”). Although not adequate to guarantee her recipients’ recognition, her intent is sufficiently clear that Carol offers a candidate as the mother (Bridget, line 7, is offered as a replacement for the word-search word nan). At line 8 Agnes confirms that the boy was the eldest child of the woman named Bridget.

Extract 9: Nanthak 20110828_JB_video_GYHM100_02_1242580_1250970

1. Agnes kawu↑kawu wun’guka deninginthadha; MoMo-RDP also -TOP 3SG.S.1sit.NFUT-DU.F.NSIB-PIMP [his] grandmother was there with him as well.

2. (1.6)

3. Lily nangkalniminka:↓ma:.=Alberta; who INTS -INDEF woman’s_name Who exactly, Alberta?

4. (0.7)

5. Agnes Awu kardu wakal- (0.6) nan nigurnuya. No NC:HUMAN child what’s_the_name 3SG.F.POS=CL No what’s her name’s kid.

6. (1.0)

7. Carol Bridjet;= Woman’s_name Bridget

8. Agnes =Bridgettukun kardu ngallla xxxx xxx Woman’s_name-DAT NC:HUMAN large xxxx xxxx Bridget’s eldest kid xxxxxxx.

9. Carol [Ba ↑yu yu yu yu;↑ Oh yeah yeah yeah yeah.

In the next section we cover the open OIR formats (Drew 1997; Enfield et al. 2013). We will see that although the open formats lack the precision of the restricted formats, they still yield the same sorts of repair operations (e.g., specifications of reference, clarifications of speakers’ intentions, repetitions of inaudible material). Although blunter instruments than the restricted formats, they tackle a wider range of trouble types. This makes them useful when the T-1 turn is inflicted by several sources of trouble.

4.2 Open formats

Murrinh-Patha has two open (lexical) formats, the interjection Aa? and the bare content question word thangku, “what?”. There are no attested formulaic or apology based formats in the collection and there is but a single sequence in which repair is initiated through visible cues alone. Open formats are said to target the whole of the prior turn (Drew 1997; Schegloff 2004; cf., Robinson 2014). This is evidenced by sequences in which B’s open RI follows an inaudible or overlapped T1 turn, and the entire T1 turn is then repeated at
Yet open formats don’t only deal with auditory problems. Drew (1997), in research based on phone calls conducted in British English, notes that open RIs sometimes deal with affiliation issues or misaligned understandings of speakers’ action intentions. The video recordings of Murrinh-Patha face-to-face interaction reveal that they also deal issues of misaligned recipiency (see §4.2.1 below), amongst other things. Open formats are essentially agnostic as to where within the prior turn the problematic items might lie, and what it is about the prior turn that happens to be problematic. This places the onus on trouble source producers to infer the nature of the trouble.

Although there is some overlap in the sorts of repair solutions that Aa? and thangku solicit, the two formats are unequal in how likely they are to yield particular repair operations. In the following sections we will be exploring the pragmatic differences between thangku and Aa?.

### 4.2.1 Interjection strategy: Aa? (“Huh?”)

The form of the OIR interjection in Murrinh-Patha (Aa? or Aa¿) is a simple monosyllable with rising intonation. The interjection generally consists of a low long vowel (normally [aː]) without ever any consonantal offsets, though some glottalization may occur in onset position [ʔaː], [haː].

The interjection Aa? often solicits a repeat of the source turn. Full or partial repetitions of the trouble source turn were solicited in 82.7% of complete three-turn sequences (24/29). For this reason, OIR interjections are often thought of as predominantly dealing with hearing problems. Yet video data reveals Aa? to also deal with the concomitant problem of misaligned recipiency. By misaligned recipiency, I mean when targeted recipients appear to have been attending to something or someone other than the person addressing them – perhaps under the assumption that the talk they were hearing was intended for someone else. This can be evidenced by the noticeable gaze shifts toward the trouble source producers which accompany certain repair initiators (especially open formats like Aa?, “Huh?”). They reveal misaligned recipients to have heard something of the talk being produced, but to have not been listening attentively enough to produce the responses that they, as targeted recipients, are expected to produce. In Extract 10 two women, Carol and Agnes, are reminding Maggie (who is quite hard of hearing) that she once saved the life of Agnes’ father when he was bitten by a snake.

**Extract 10:** Dingalingu 20110730 JB_video_GYHM100_04_1031130

1 Carol \[kaka ↑ngay thama↑\] T-1
   kaka ngay thama
   MoBr 1SG 2SG.S.34say/do.FUT
   {He was} My uncle, you know!

2 Agnes (\[]\)
3 (0.5)
4 Agnes ngal[dedi] ngay;
   hey dedi ngay
   INTJ father 1SG
   Hey, my father!

5 Maggie \[Aa? \] T0
   aa
   OIR.INTJ
   Huh? ((turns her head to face Carol))

6 (0.5)
7 Carol kaka ngay thama.
   kaka ngay thama
   MoBr 1SG 2SG.S.34say/do.FUT
   {He was} My uncle, you know!
In an overlapped utterance, Carol (at line 1) points out that the man was her uncle. As she says this she is gazing at Maggie. Also in overlap, Maggie (at line 5) uses the interjection Aa? to initiate repair as she shifts her gaze from Maggie toward Carol. At line 7 Carol produces a verbatim repeat of the overlapped utterance (albeit at a lower pitch-register) kaka ngay thama, “my uncle, you know”. She thus treats the problem as an audibility issue. Yet overlap-induced inaudibility does not wholly account for the repair initiator. That Maggie turns her head to meet Carol’s gaze points to previously inadequate (or misaligned) recipiency. Carol’s marked jump in pitch register at line 1 (↑ngay thama↑), whilst certainly resolving the overlap, also secures the attention of Maggie, who had been the target of the reminder.

Aa? does not always solicit repetition of the trouble source turn. Sometimes trouble source producers presume their prior utterance to require clarification or explanation. Extract 11 is a case in point.

Extract 11: Da Ngarne 20091121jBvid03_1357790

1 Peggy 'nan’dji tin marrare ninangammardatjip;
   nandji tin marra -re ninangam -mardatjip
   residue tin now -TEMP 3SG.S.27.NFUT-burn_until_black
My billycan has gone black now.
   (0.2)
2 Peggy Kanyi ninangammarda- kuraka nukunuka Geoffreyka wurrangurdugurduyu.
   kanyi ninangam -mardatjip [truncated] kura -ka nukunu -ka
   PROX 3SG.S.27.NFUT-burn_until_black NC:WATER-TOP 3SG.M -TOP
   Geoffrey -ka wurrang -gurdugurd -yu
   man's_name-TOP 3SG.S.6go.NFUT-be_drinking =CL
   This has gone bla- Geoffrey uses it for drinking from.
   (0.4)
4 Lily HES
   Um xxxxx xxx
   (0.3)
5 Mabel bilikan terertwa; nganaka, T-1
   bilikan terert-wa nganaka
   billycan many-EMPH you_know?
   lots of billycans you know?
   (0.6)
7 Peggy Aa? T0
   OIR.INTJ
   Huh?
   (1.0)
9 Mabel ngarra shg:p; T+1
   ngarra shop
   LOC shop
   in the shop
   (0.3)

In lines 1 and 3 of Extract 11, Peggy remarks that her billycan (a cylindrical pot used for boiling water) has gone black (because it has been used on an open fire), and that her son Geoffrey likes to drink from it. At line 6 Mabel chimes in, nandji bilikan terert nganaka, “lots of billycans, you know.” Following Peggy’s OIR interjection (Aa?) at line 8, Mabel elaborates by effectively continuing from where she had previously left off. By appending “in the shop” (ngarra shop) to “lots of billycans”, she points out the availability of new, unblackened billycans (quite suitable for Geoffrey to drink from). So doing, she deals with a potential topical disjuncture brought about by a mismatch in number (i.e., the talk moves from a single billycan to multiple billycans). Here the repair solution solicited by Aa? deals with the T-1 turn not being obviously
relevant to the talk that preceded it. Note that there is no overlap at T-1, the line is articulated clearly and there are no gaze shifts that might otherwise be associated with audibility or recipiency issues. Extracts 10 and 11 show *Aa?* being used for a range of different trouble types and being solved by quite different repair operations.

### 4.2.2 Question word strategy: thangku (“what?”)

As an RI, the bare form *thangku* is the approximate functional counterpart to the upward intoned *what?* in English. It is an all-rounder that can be effectively deployed for dealing with talk that is problematic in more ways than one. In Extract 12, Carol is informing her daughter, Jenny, and sister, Ruby, about a neighbour who has been complaining about an unpaid debt, a debt that Jenny seems to be at least partly responsible for.

**Extract 12:** Museum 20090707\_Bvid04\_487178

1. Carol  
   ku weitandert eitandert ngarra;=  
   ku eitandert eitandert ngarra  
   NC:ANM eight_hundred eight_hundred where  
   “The eight hundred, eight hundred, where is it?”

2.   =lk u ngarra-l  
   ku ngarra  
   NC:ANM where  
   “Where is it?”

3. Jenny  
   ==>(Awu Ruby\_ka damatha help mangaru;=purrunu nawa.)<<  
   awu Ruby -ka damatha help ma -nga -nu  
   Oh! woman’s_name-TOP INTENS help 3SG.S.8say/do.FUT\_1SG.IO-FUT  
   purru -nu na -wa  
   1NS.INC.S.6go.FUT-FUT TAG-EMPH  
   Oh Ruby is going to help me, we’re going, aren’t we.

4. (0.2)

5. Ruby  
   thangku.  
   what  
   What?

6. (1.0)

7. Jenny  
   ngarra council tjenydjim manganu;  
   ngarra tjenydjim ma -nga -nu  
   LOC change_something 3SG.S.8say/do.FUT\_1SG.IO-FUT  
   At the council offices she’ll change it for me.

8. Carol  
   tjenydjjimmarda ngamanu ngayyu;  
   tjenydjim -warda ngama -nu ngay =yu  
   change_something-TEMP 1SG.S.34say/do.FUT-FUT 1SG =CL  
   I’ll change it.

At lines 1 and 2 Carol animates the neighbours’ demands for $800. At line 3, Jenny turns to Ruby and rapidly explains that Ruby will help her when they go. At line 5 Ruby initiates repair with the interrogative word *thangku*, “what?”. At line 7 Jenny elaborates by explaining that at the council offices Ruby will change something for her – perhaps a PIN number, or a cheque. At line 8, her mother Carol offers to help her change it (evidently she understands what needed changing). The repair solution makes clear where they will go (a referential specification), how Ruby will help (a clarification of her intended meaning). So doing
she makes the topical link to the matter of the debt more transparent. Although the beginning of line 3 had been produced in overlap, Jenny does not repeat the overlapped material, so doesn’t treat it as inaudible. However, whereas the previous turn had been rapidly mumbled, her articulation in the repair solution is slower and clearer. In Extract 12 Jenny thus performs four sorts of repair operation: she provides a referential specification, she explains her intent, she deals with possible topical disjuncture and refines her elocution. Here thangku effects major enhancements to the build quality of Jenny’s interactional contribution.

4.2.3 Other open strategies

Both thangku and Aa? are non-specialist RIs, as is true of all open RIs, including the visually cued RIs. Given that the open RIs do overlap functionally, we should not be surprised that they occur within the same interactional environments. In Extract 13 we find both Aa? and thangku produced by different speakers within the same sequential environment and a “visible” repair initiation shortly afterwards, for more or less the same reasons. Prior to this extract Mary has been recounting the boating misadventure story we previously encountered at Extract 2. As she pounds longbums (Telescopium telescopium) to extract the tasty mollusk from inside, she speaks with her head bowed down. As she mumbles into the ground, Lily becomes concerned that the microphone won’t pick up what she is saying. The microphone in question, here housed within a “dead cat” windshield, is perched above their heads on a stand, placed next to the tree under which they are sitting (see Figure 2). This item is not indigenous paraphernalia so what Lily should call it is not straightforward. For the others, her references to it become a source of utter bewilderment.

Figure 2: The “dead cat” windshield is perched above the speakers’ heads.

Extract 13: Da Ngarne 20091121Jbvid03_947645

1 Mary   ↓Da pilampi ngalla (ngurniwinart). (1.6) pungawuy.↓
da            pilampi  ngalla ngurni                         -winart       pungam           -wuy
NC:PL/T salt_flat big       1PL.EX.SB.6go.PIMP-go_along 3PLS.33.NFUT-exit
We were going along the big salt flats. They got out {of the boat}.
2 (0.7)
3 Lily "ya" (.)
ya
HES
Um (Lily points towards Mary who isn’t watching)
4 Mary puy; (0.3)
puy
keep_going
off they went
5 Lily ((Lily waves hand to get Mary’s attention))
6 Lily ya
HES
Um
7 Lily ((Lily waves hand to get Mary’s attention))
8 Mary Ay
INTJ
yeah
9 Lily ((points up overhead into the tree)) T1

10 Mary thangku;
what
what?
11 Gracie Aa¿
OIR.INTJ
Huh?
(0.3)
12 Lily yawu:;
yawu
hey!
Hey! ((points up overhead, seemingly into the tree))
13 Lily (2.7) ((Mary and Lily gaze up into tree, then at each other, then at Lily)) T0
Lily makes three consecutive attempts at securing Mary’s attention (lines 3, 5 and at lines 6 and 7). At line 8 Mary answers the final summons. The trouble begins at line 9 when Lily points upwards (T1). At line 10 Mary uses thangku “what” and Gracie uses Aa? (“Huh?”, at line 11) to initiate repair on the pointing gesture. At line 13, Lily repeats the point while adding the interjection Yawu, “hey!” (T+1, T-1). Gracie and Mary look up into the tree, then look blankly at each other, and then look at Lily (line 14). This sequence of blank looks amounts to a visibly cued other initiation of repair (T0). At line 15 Lily instructs Mary to “speak up towards the thing hanging up there” (tjingerrenkathu nandji kangkarl pindjim). This accurate, though ad-hoc description of the microphone eludes the two women. There are further unsuccessful attempts at initiating repair on Lily’s references to this problematic item (one using thangku, though excluded here for the sake of brevity). They never do learn what she was talking about. That Lily is encouraging Mary to stop mumbling into the ground has quite literally gone over their heads. Thangku, Aa?, and the blank looks are appropriate RIs to produce when completely baffled by what has just transpired. They each solicit repetition (of points) and each elicits elaboration or expansion of the T-1 turn, although in this case the problem is intractable and remains unsolved.

4.2.4 A quantitative analysis of open repair operations

In research on English talk-in-interaction Drew (1997, 73) and Robinson (2006, 142) detect no functional or interactional differences between Huh? and What? In the English OIR collection analysed by Kendrick in this issue, Huh? and What occurred with equal frequency, although with slightly different distributional patterns. In the Murrinh-Patha conversational corpus the question word thangku is four times less frequent than the interjection Aa?. Whether this disparity reflects differences in their usage is the subject of the following quantitative investigation.

In the HSSLU coding scheme outlined in this special issue, questions D1 and D3 compared T+1 turns to T-1 turns. While D1 determined whether T-1 or items therein are repeated in T+1, D3 investigated whether items within T-1 were “modified” in some respect. The latter’s conflation of different repair operations under...
the banner “modification” revealed little about the sorts of trouble sources that brought on particular OIR formats, and did not capture the breadth of Aa? and thangku’s utility. Based on qualitative (CA) analyses of several conversational extracts, I introduced four new coding questions that also compared T-1 and T+1 turns. Thus sequences were coded for: whether T+1 attends to issues of audibility and/or misaligned recipiency (A/MR) (as in Extracts 10 and 12), whether the T+1 included repeated material from T-1 (REP)\(^\prime\) (as in Extract 10), whether the T+1 turn explains speaker A’s intended meaning at T-1 (INTENT) (as in Extracts 11 and 12), whether T+1 attends to issues of relevance or topical disjuncture (R/TD) (as in Extracts 11 and 12), or whether T+1 expands or elaborates an underspecified reference or process (SPEC) (as in Extract 12).

This investigation measures how often Aa? and thangku target particular types of trouble sources. Because qualitative analyses revealed that certain category specific restricted RIs yielded similar types of repair operations, as a point of comparison, the same coding questions were also applied to the person-specific format nangkal (+) (“who”, “whose”, etc.), the place-specific format ngarra (+) (“where?”, “where to?”, etc.), and the thangku + collection of formats (“what animate?”, “what vegetable?”, “what for?”, etc.). The total number of complete OIR sequences per format are listed in Table 5. Because the total counts for thangku and thangku+ are not high, for the purpose of comparison with Aa?, the counts for each type of repair operation were transformed as percentages relative to the interjection’s total count of 29 (see Table 6). The coding results are displayed in Figure 3 as grouped bar plots. These transformed figures are not amenable to tests of statistical significance (due to the low counts for thangku and thangku+). Nevertheless, they do suggest certain interesting patterns.

Table 5: Total raw counts for complete OIR sequences, per format.

<table>
<thead>
<tr>
<th>Format</th>
<th>Aa?</th>
<th>Thangku</th>
<th>Thangku+</th>
<th>Ngarra(+)</th>
<th>Nangkal(+)</th>
</tr>
</thead>
<tbody>
<tr>
<td>n = number of complete OIR sequences</td>
<td>29</td>
<td>7</td>
<td>7</td>
<td>19</td>
<td>16</td>
</tr>
</tbody>
</table>

Table 6: The proportion of repair operations (as a % of n) solicited at T+1, per format.

<table>
<thead>
<tr>
<th>Repair Category</th>
<th>Aa?</th>
<th>Thangku</th>
<th>Thangku+</th>
<th>Ngarra(+)</th>
<th>Nangkal(+)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Audibility / misaligned recipiency (A/MR)</td>
<td>82.7</td>
<td>28.6</td>
<td>14.3</td>
<td>5.3</td>
<td>18.7</td>
</tr>
<tr>
<td>Repetition (REP)</td>
<td>82.7</td>
<td>28.6</td>
<td>28.6</td>
<td>63.1</td>
<td>31.2</td>
</tr>
<tr>
<td>Intended meaning (INTENT)</td>
<td>27.6</td>
<td>71.4</td>
<td>14</td>
<td>5.3</td>
<td>6.2</td>
</tr>
<tr>
<td>Relevance/topical disjuncture (R/TD)</td>
<td>27.6</td>
<td>71.4</td>
<td>42</td>
<td>5.3</td>
<td>0</td>
</tr>
<tr>
<td>Specification (SPEC)</td>
<td>41.4</td>
<td>85.7</td>
<td>57.1</td>
<td>94.7</td>
<td>100</td>
</tr>
</tbody>
</table>

\(^\prime\) When a trouble source item is overlapped by another speaker, a loud bang, engine noise, dogs barking, etc., or when or the trouble source producer mumbles/turns their head away/is located in an adjacent room, etc., there is external evidence suggesting that audibility is an issue. Although these situations normally result in some form of repetition, it is important not to rely on repetition as the sole diagnostic for an audibility issue. With respect to coding, it was assumed that repetition needn’t be the only outcome for these sorts of trouble sources.
With regard to the restricted formats, as expected, ngarra (“where”) and nangkal (“who”) are overwhelmingly used for referential specification. However, a few tokens also clarified intended meanings and helped with misaligned recipiency. Thangku+ also pushes for referential specification. However it is equally likely to produce repetition of trouble source items.\(^{18}\) In the open formats, audibility and misaligned recipiency are closely correlated with full or partial repetition of the trouble source turn.\(^{19}\) Aa? and thangku deal with the same range of problems so have overlapping functional loads. However Aa? is more coercive of audibility and recipiency alignment operations than thangku. Both seek elaboration on speakers’ intentions, attend to relevance issues and topical disjuncture, and result in referential specifications; yet thangku is far more coercive in these respects than Aa?. Effectively, the two open RI formats are biased pragmatically in different directions. That the interjection surfaces more often than the question word probably reflects these differences in pragmatic bias.

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\(^{18}\) One should be cautious about interpreting the inclination of this group. Thangku+ covers a range of specialized restricted formats that just happen to be built out of thangku derived interrogatives. It is essentially a mixed bag of low frequency formats which may, individually, be more specialized than the grouped bar plot suggests.

\(^{19}\) Although this correlation was expected, repetition was not used as a diagnostic for coding audibility. Overlap, extraneous noise and discernibility of phonemes informed the audibility coding. Repetition was coded separately. The correlation vanishes in the restricted formats.
In order to measure the versatility of these formats, I also coded for whether two or less, or more than two repair operations were elicited by the respective OIR formats. Figure 4 reveals the three restricted formats _nangkal_ (+), _ngarra_ (+) and _thangku_ + to be unlikely to solicit more than two repair operations and highly likely to solicit only one or two repair operations. By contrast, the open formats are more likely to solicit more than two repair operations. Indeed, open _thangku_ is reasonably unlikely to solicit merely one or two. The versatility of the open formats, particularly _thangku_, is revealed not only in the range of repair operations that they handle, but also in their regularly attending to several potential sources of trouble at the same time.

5 Conclusion

In this article I have presented a functional description of the system of formats used by Murrinh-Patha speakers for OIR. Although specific to this language, there are certain broader lessons about how OIR formats function as a system. All OIR formats are talk interrogation devices. They function as questions even if they aren’t explicitly built (lexically, morphosyntactically, prosodically) as such. Formats vary in the ways that they target trouble sources, and how well they target them. They also vary in how forcefully they elicit particular repair operations. Although restricted formats are specialists and open formats all-rounders, the repair operations they solicit are of the same types. None of the formats show a one-to-one relationship between repair initiation practices and repair operations, although a many-to-one relationship is especially true of the more versatile open formats. In deciding how to interpret repair initiators, trouble source producers must bring to bear extraneous factors such as noise, overlap, mutual gaze, and participants’ engagement with other activities (or otherwise) when considering the format of the initiator. These factors, along with acquired knowledge about the normative function of each OIR format, drive inferences about what might be problematic for recipients and how best to tackle those problems. This is how, when intersubjectivity begins to slip, OIR can so powerfully regain the necessary traction for successful human interaction.

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Abbreviations

ANAPH: anaphoric demonstrative
CL: clitic
DIST: distal demonstrative
DU: dual
EX: exclusive of the addressee
F: feminine
FOC: focus
FUT: future
HES: hesitation
INC: inclusive of the addressee
INDEF: indefinite
INTJ: interjection
INTS: intensifier
LOC: locative
M: masculine
MoBr: mother’s brother
MoMo: mother’s mother
NC:ANM: “animate” noun class
NC:FIRE: “fire” noun class
NC:HUMAN: “human” noun class
NC:PL/T: “place/time” noun class
NC:RES: “residue” noun class
NC:WATER: “water” noun class
NEG: negator/negation
NFUT: non-future
NS: non-singular
OIR: (next turn/position) other initiation of repair
PIMP: past imperfective
PST: past tense
PSTIRR: past irrealis
PC: paucal
PL: plural
RECN: recognitional demonstrative
RDP: reduplication
RI: repair initiation
S: subject
SG: singular
STRI: same turn initiation of repair
TAG: tag particle
TOP: topic

Symbols relating to the transcription of speech

(0.9) Silence (i.e., 0.9 seconds).
( . ) 0.1 seconds of silence.
- An abrupt cut off, usually a glottal stop.
= Latching (no gap or overlap between different speakers).
= Where the ‘=’ sign occurs mid-line, this indicates the immediate continuation of the turn after a point of possible completion.
xxx xx Indiscernible speech.
( ) Indiscernible speech.
(text) Difficult to discern text. Bracketing indicates either a best guess at transcription or text alleged by consultants that I believe to be dubious.
((text)) Transcriber’s comments
*text* Utterance is softer than surrounding talk.
>text< Utterance delivered faster than surrounding speech.
<text> Utterance delivered slower than surrounding speech.
stress Stress is marked by underlining.
Other-initiated repair in Murrinh-Patha

References


Dingemanse, Mark, Kobin H. Kendrick, and N.J. Enfield. forthcoming. “A Coding Scheme for Other-Initiated Repair across Languages.” Open Linguistics


