

Place Reference and Pointing in Gija Conversation

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Declaration

I hereby declare that this thesis has not previously been submitted for a degree or diploma in any university. To the best of my knowledge and belief, the thesis contains no material previously published or written by another person except where due reference is made in the thesis itself.

This thesis was granted approval by the Macquarie University Ethics Review Committee (Human Research) (reference: 5201919198349) and was conducted in accordance with this approval.

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Abstract

This thesis investigates place reference in conversations conducted in Gija; an endangered Australian Aboriginal language from the East Kimberley region, northern Western Australia. Sixty-six minutes of video-recorded multiparty conversation were transcribed and analysed with the aims of investigating how spatial relationships are expressed through talk and pointing gestures, and the ways that participants manage problems that arise in the context of place reference. This thesis adopts an innovative 'geospatial' approach to multimodal conversation analysis through the use of a Geographic Information System (GIS) from Google Earth. This method laminates occasions of place reference onto actual geographical space, thus creating an additional layer of 'situatedness'. This is one of the few comprehensive studies of gesture and its relationship to talk conducted in an Australian language and one of the first to draw on informal conversational data. Findings reveal the overlapping use of absolute and intrinsic spatial systems in Gija. The innovative application of interactional linguistics advances our understandings of Gija demonstratives and the semantics of certain suffixes and enclitics used to mark motion between specified locations.

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Chapter 1 Introduction

1.1 Overview

This thesis takes inspiration from conversation analysis (CA) to explore how Gija speakers organise their social behaviour during occasions of place reference. It incorporates geospatial technology to map place references onto geographical space, thus creating an additional layer of 'situatedness', and enabling us to observe the meanings of embodied locational expressions.

Over the last two decades, the scope of CA has widened to encompass various embodied resources that contribute to the formulation of social action. This study aligns with multimodal views of communication, which claim that social action is accomplished through combinations of semiotic materials that become 'mutually elaborating action packages' (Goodwin, 2017), including language and its prosodic features, eye gaze direction, body posture and orientation, and manual gestures (e.g., Enfield, 2009; Goodwin, 2004; Heath & Luff, 2012; Kendon, 2004; Mondada, 2014b, 2014a; Streeck, 2009, 2013; Streeck, Goodwin, & LeBaron, (Eds.), 2011).

Only a small number of studies on Australian Aboriginal languages have investigated spatial representations in detail (e.g., Green, 2014b; Haviland, 1993, 1998; Levinson, 1997, 2003; Meakins et al., 2016). Even fewer have investigated space in Australian languages from an interactional standpoint (e.g., Blythe et al., 2016). No such study of Gija has been conducted thus far, and most existing studies do not represent the diversity of spatial strategies used by speakers of Australian Aboriginal languages. This thesis offers insight into how Gija speakers express spatial relationships through speech and pointing gestures. This research is not intended to overshadow Indigenous intellectual traditions with regard to knowledges of place and connections to land (e.g., Kofod, 2003; Merlan, 1981; Rumsey,

1993). It presents an additional perspective that emerges from Western research methodologies.

1.2 Conversation Analysis and Interactional Linguistics

The development of CA in the late 1960s-1970s was motivated by the sociological and ethnomethodological interests of its creators: Harvey Sacks, Emanuel Schegloff and Gail Jefferson. Clift (2016, p. 26) notes that the preoccupation of CA with the organisation of interaction "has meant that it has traditionally declined to accord any primacy to language per se, except and insofar as it constitutes a vehicle for social action." The concern with language as one component of situated action is vastly different from the preoccupation of formal linguistics, which considers "utterances in isolation from one another or without reference to the social environment" (Maynard, 2012, p. 24).

CA offers a distinct approach to interaction, with theoretical roots in the work of social scientists Harold Garfinkel and Erving Goffman. Garfinkel contributed a new branch of sociology: *ethnomethodology*, which has predominantly been used in contexts of social interaction. The ethnomethodological approach to interaction focusses on the observable behaviour of people participating in their daily activities. Both Garfinkel and Goffman made "the greasy parts of speech" (Goffman, 1964, p. 133) and the details of everyday life the object of systematic inquiry (Clift, 2016 p. 35).

The influence of Goffmanian sociology on CA is evident through the transfer of foundational ideas related to human interaction in everyday and institutional settings. This ethos is reflected in the CA approach to interaction, "grounded in the observable details of conduct" (Schegloff, 1996a, p. 167). However, Goffman's focus on 'ritual', 'face', and various cultural rules in interaction marks a distinct point of difference, as CA focusses more on

interaction as a system comprising organised structures and sequences (Maynard, 2012, p. 17).

CA is now an internationally recognised paradigm relevant for linguistics and social science. It provides a means of investigating the ways in which what we *do* with words (Austin, 1962), systematically unfolds in sequences. Its robust methods of argumentation, its analytic framework, and Jefferson's system for detailed transcription (2004), have been applied to investigations in workplace and institutional settings (e.g., Heath & Luff, 2012; Mondada, 2013), and across different languages and cultures (e.g., Dingemanse et al., 2014; Dingemanse et al., 2017; Dingemanse & Enfield, 2015; Dingemanse et al., 2015).

Interactional linguistics (IL) then developed from CA as a means of investigating the bidirectional influence between linguistic structures and interaction (Selting & Couper-Kuhlen, 2001). According to this perspective, interaction is an emergent, situated, and context-sensitive event, where various communicative resources are used to realise conversational structures. The development of IL marks a distinct shift from the sociological thrust of classic CA, to a focus on the nature of language and its structural properties as a means of undertaking rigorous investigations of talk-in-interaction. Schegloff (1996b) argues that a systematic inquiry of talk requires investigation of the mutual influence of the organisational structures of language, and those of interaction (p. 52). Grammar is one such linguistic organisational structure that is central to shaping turns-at-talk (Schegloff, 1996b, p. 53). More recently, research in this domain has pursued questions related to the universal features of human communication, which have been shown to operate similarly across different languages and cultural groups (e.g., Stivers et al., 2009), and are directed through various channels, in multiple modalities.

Despite the ubiquity of co-speech gesturing in face-to-face interaction, there is a paucity of data on gesture (and sign) use in informal conversations, particularly those

conducted in Australian Aboriginal languages. Recently, steps have been taken to uncover the semiotically diverse nature of Australian Aboriginal communication in the "ecological niche" (Schegloff, 2006) of face-to-face interaction. Research in this area has explored 'alternate' sign languages and the cultural constraints that restrict the usage of traditional spoken languages (Kendon, 1988), pointing and spatial description (Blythe et al., 2016; Haviland, 1993), and the distinctive ways that social action is constructed out of a bricolage of semiotic materials in concert, for example, in sand-story narratives (Green & Wilkins, 2014; Green, 2014a, 2014b). Research in this area has also made significant contributions by challenging previously held cultural claims regarding Aboriginal conversational style (Blythe et al., 2018; Gardner, 2010; Gardner & Mushin, 2010; Mushin & Gardner, 2009; Rendle-Short & Moses, 2010), such as the toleration of silence (e.g., Eades, 2000) and resistance to answering questions (e.g., Eades, 1982).

1.3 Multimodality in CA

Stivers and Sidnell (2005) outline two contrasting modalities inherent to human communication - the *vocal/aural modality*, and the *visuospatial* modality, which shape emergent actions in interaction. Within these two modalities, multiple channels operate. The vocal/aural modality encompasses the lexico-syntactic and prosodic channels, whereas the visuospatial modality contains channels for body orientation, gesture, facial expression and eye gaze. An additional and underexplored modality is that of *touch*, which is used for communication in tactile sign languages (e.g., Iwasaki et al., 2019). Green and Wilkins (2014) note that 'touch and haptic sensation' is harnessed by vision-impaired interlocutors in some Arandic communities, who communicate through *iltye lyarnemele ileme* ('telling by touching the hand') (p. 257). Tactile and haptic experiences, and the ways that participants sensorially engage in their surroundings (Mondada, 2019), reveals another dimension of interaction

conducted in the visuospatial modality, which is relatively underexplored in comparison to the visual preoccupation of most interactional studies on the human body and its movement (e.g., Streeck, 2013).

Early conversation analytic investigations relied on audio recordings of telephone conversations (e.g., Sacks et al., 1974), which resulted in a primary focus on the vocal/aural modality. Over time, the scope of CA has developed to incorporate the various embodied and linguistic resources that contribute to the formulation of social action. After all, "the natural home of speech is one in which speech is not always present" (Goffman, 1964, p. 135). Developments in digital video recording technology have made the visuospatial modality increasingly accessible to analysts, and have led to new analytic possibilities and theoretical developments in the discipline. Such advances have contributed to understandings of language as *experienced* through the body, and social action as attributed not only to language, but to the interplay of spatiotemporal assemblages.

Most CA research on the infrastructure of interaction has focused on the vocal/aural modality (e.g., repair organisation through speech). However, a growing body of work has demonstrated that these aspects of interaction also function in the visuospatial modality (e.g., Blythe et al., 2018; Floyd et al., 2016; Lerner, 2003; Mondada, 2013; Rossano, 2012). Beginning in the 1970s, Marjorie and Charles Goodwin provided insights into the co-operative nature of semiotic materials that compose packages of social action (e.g., Goodwin, 2013, 2017), including eye gaze as crucial to securing reciprocity (e.g., Goodwin, 1979). Multimodal approaches to interaction have also been applied to ethnomethodologically driven workplace and institutional studies (see Heath & Luff, 2012). Mondada's research on both institutional contexts and quotidian settings focuses on the ways that interactants mobilise multimodal resources to organise their social behaviour. Examining the infrastructure of interaction through a multimodal lens, for instance *turn-taking* (e.g., Mondada, 2007), or

repair sequences (e.g., Floyd et al., 2016), draws previously overlooked embodied dimensions of conversational structures to the surface.

As a result of these developments, multimodal utterances have been conceptualised throughout the literature as *moves* (Goffman, 1981), *visible actions* (Kendon, 2004), *composite utterances* (Enfield, 2009), *language +* (Enfield, 2014, pp. 36-37) and *multimodal gestalts* (Mondada, 2014a, 2014b); similar notions developed in other research traditions include *composite signals* (Clark, 1996), *integrated messages* (Bavelas & Chovil, 2000) and *semantic gestalts* (Farnell, 2005). This study adopts the term *moves* to account for composite units of social action, which are constructed from a range of semiotic resources and interpreted as a whole (Enfield, 2013). Employing theories and research methods that systematically account for talk and bodily action reflects the importance of accounting for human bodies as enduring and flexible meaning-making resources.

1.4 Place Reference

Place reference is one particular interactional domain where the coordination of talk and bodily action is central to achieving reciprocity. This study adopts a definition of place reference as a potential answer to a *where*-question (see Dingemanse et al., 2017, p. 129; San Roque, 2016). In CA, analysts focus on the range of interactional principles and action formulation options that make reference "a matter of *selection*" (Enfield, 2012, p. 433, original emphasis). In referring to a place or entity in conversation, a selected expression can be understood as being one option from a range of alternatives.

Previous research in the domain of conversational reference has predominantly focused on person reference and apparently *unmarked* ways of referring (e.g., the use of a name as an initial reference, and "she" for locally subsequent reference). However, Enfield and San Roque (2017, p. 583) reason that "referring is not an unmarked, simple linguistic

activity... [it] always entails a choice as to which words and constructions to use, and by extension, which words and constructions *not* to use" (see also Blythe et al., 2016; Enfield, 2007; Schegloff, 1972; Williams, 2017, 2016, pp. 15-17). Although unmarked practices of person reference have previously been thought not to do anything beyond referring (Schegloff, 1996), Enfield (2007) argues that these expressions in fact display the culture-specific views of the person doing the referring.

Research on person reference has identified the principles of *recognition* (i.e., recipient design) and *minimisation* (i.e., economy of formulation), which are argued to operate cross-linguistically (Enfield, 2012; Enfield & Stivers, 2007b; Levinson, 2007; Sacks & Schegloff, 1979). However, the possibility that these principles function in the domain of place reference is less established (Enfield, 2012; Enfield & Stivers, 2007; Sacks & Schegloff, 1979; Williams, 2017). The principle of *circumspection*, which incorporates the local and cultural constraints that affect referential practices, has also been acknowledged (Blythe et al., 2016; Levinson, 2007). Another point for consideration concerns stances about places that emerge as socially significant in often entangled referential practices (Sicoli, 2016). The intimate connections between people, language and country in Aboriginal Australia means the investigation of place reference by these speakers may be particularly valuable for understanding its culture-specific and universal features.

Despite evidence that "place references are formally diverse, culturally meaningful, and inferentially rich" (Dingemanse et al., 2017, p. 154), systematic interactional research on this issue is limited. However, emerging research has contributed new insights into, for instance, the semantics of demonstrative use (Enfield, 2003), new grammatical descriptions of under-explored linguistic categories used during spatial description (e.g., Williams, 2016, 2017), and what referential *ontological crossings* reveal about "language as cultural practice" (Sicoli, 2016, p. 189).

1.5 Theoretical Debates Around the Speech-Gesture Relation

Developments in multimodal views of communication have inspired methodological and theoretical arguments related to positioning language and gesture within a shared framework. These positions are reflected in the emphasis that more recent conversation analytic studies place on embodied conduct. But it is also worth noting that theoretical debates about the primacy of spoken language over sign language and visible bodily behaviour have also emerged.

A number of proposals on the relationship between language and gesture over evolutionary time have been formulated. For instance, Sereno (2014) claims that the emergence of language preceded that of gesture, thus suggesting the predominance of the vocal modality. Evolutionary theories in support of the "gesture-first" hypothesis argue that human language evolved from manual gestures, which formed a fully functional system prior to conventionalised speech (e.g., Corballis, 2002, 2010; Hewes, 1973). However, Kendon (2017) argues that this position fails to address several looming questions related to the human ability for speech production and reception, and the unproductiveness of confining symbolic expression to a single modality. Thus, he proposes an alternative perspective, where "gesturing is a part of languaging" (Kendon, 2017, p. 168). According to this evaluation, the coordination of various streams of multimodal information during face-to-face interaction indicates that language and gesture were equiprimordial (i.e., that they evolved together).

Foundational work on placing language and gesture within a shared theoretical framework has focused on the influence of socio-psychological factors on gestural behaviour (Efron, 1941) and the embodied expression of social meaning (Birdwhistell, 1952). The notion that speech and gesture form a unified system (Clark, 1996; Kita & Özyürek, 2003; McNeill, 1992, 2005; Kendon, 2004) was established through early observations of naturally-occurring conversation, and the tight relationship between gesture and speech in utterance

formation (e.g., Kendon, 1988; Schegloff, 1984). Psychological and cognitive research has also supported broadening current perspectives of *language*, as the highly systematic and synchronous relation between gesture and speech suggests a shared internal stage in processing (Goldin-Meadow, 2014; McNeill, 1985) and a single course of production (Goldin-Meadow & Brentari, 2017, p. 10). Research on the *disruption* of gesture and speech synchrony (i.e., when gesture stops altogether during occasions such as stuttering) provides possible evidence for this proposal (e.g., Mayberry & Jaques, 2000).

Despite previous theories viewing gesture as an accessory to speech, current multimodal views of communication argue that gesture and speech form single units of meaning, which are conceptually linked through timing, semantics and pragmatics (e.g., McNeill, 2000; see also Goldin-Meadow & Brentari, 2017, pp. 10-12; Quek et al., 2002, p. 178), as well as comprehension (e.g., Kelly et al., 2010). Blythe et al. (2016) offer compelling support for broadening conceptions of *language* to incorporate co-speech gesture, by demonstrating that referring to places in the Australian language Murrinhpatha involves a convergence of interdependent semiotic resources (see also Floyd, 2016; Goldin-Meadow, 2014; McNeill, 1992, 2000). This study shows Murrinhpatha speakers' reliance on *pointing gestures* in particular, which are socially and culturally unimpeded compared with the restrictions that language taboos place on speech.

1.6 Pointing Gestures

The basic communicative status of manual pointing gestures is well established (e.g., Wundt, 1973/1921). This is reflected in research on the significance of these gestures in fields, such as psychology (e.g., Wundt, 1973/1921), ethnography (e.g., Haviland, 1993; Sherzer, 1973), and in research on speakers with communication disorders, such as aphasia

(e.g., Dipper et al., 2015; Klippi, 2015). Pointing also plays an important role in place and person reference (Kita, 2003b). However, Levinson (2007) notes that differences amongst Yélf Dnye speakers in the functions of pointing gestures arise in these contexts; those used for *person reference* are not typically directed towards the target person(s) unless they are present, whereas those used for *place reference* by speakers who favour absolute geocentric coordinates contain directional precision and are intended to indicate the actual direction of the referent (cf. Schegloff, 1984, for English speakers).

Research in child language acquisition has investigated pointing as a proto linguistic means of communication (e.g., Bates et al., 1975; Carpenter et al., 1998; Scaife & Bruner, 1975). From this perspective, points constitute a 'bridge' for the transition from non-linguistic to linguistic communication in infants (Butterworth & Morissette, 1996, p. 229; Butterworth, 2003), signifying a pivotal transition from non-linguistic to linguistic communicative forms (Tomasello et al., 2007) and functioning as a predictor of later verbalised vocabulary and syntax structure (Goldin-Meadow, 2014, p. 3). In this domain, pointing is considered a signal for the human ability for shared intentionality and social cognition (Povinelli et al., 2003; Tomasello et al., 2005; Tomasello et al., 2007).

Studies on the relationships between gesture and space across different languages have also adopted a focus on pointing gestures (e.g., Enfield, 2009; Enfield et al., 2007; Kita, 2003; Levinson, 2003). In this research domain, Kita (2003b) describes the prototypical point as "a communicative body movement that projects a vector from a body part... [and] indicates a certain direction, location or object" (p. 1). Moreover, Enfield et al. (2007) define this particular 'deictic gesture' (McNeill, 1992) as "*a communicative bodily movement which projects a vector whose direction is determined, in the context, by the conceived spatial location, relative to the person performing the gesture, of a place or thing relevant to the current utterance*" (p. 1724, original emphasis). This study adopts a view of pointing as a

practice that involves any part of the body (Kita, 2003b), whether it be an index-finger, lips, a hand or marked eye gaze (cf. Cutfield, 2018), and is intended to direct a present person's attention towards a particular place or entity within a shared context or joint attentional frame.

The practice of pointing involves an *anchor* or *origo* (a vector source), a *target* (the referent of the point), and a *vector* (an axis that translates the direction of the gesture as guided by the anchor, for example, a lip or index-finger point). Le Guen (2011a) provides a typology of pointing, which distinguishes between direct, metonymic, and metaphorical points in contexts where the speaker's position converges with the ground. *Direct* pointing (Le Guen, 2011a, pp. 277-279) describes a point that is aimed at a target, which signifies an actual place or entity in the real-world. *Metonymic* (Le Guen, 2011a, pp. 279-280), or *deferred* pointing (Borg, 2002) involves referring to a non-present referent by pointing to a place or entity that carries their association. This type of point has been shown to operate similarly across various shared sign languages and different cultures, where signers have been reported to specify pronominal reference by pointing to locations that are commonly associated with the referred-to person (Bauer, 2014, p. 149; Nyst, 2012, p. 564). *Metaphorical* (Le Guen, 2011a, pp. 280-283), or *abstract* pointing (McNeill, Cassell, & Levy, 1993) involves a target that is unrelated to the actual target entity, and is located in the gesture space in front of the speaker. This generates an arbitrary relation between the referent and the locus of the point, which can be used anaphorically in the discourse (see Bauer, 2014, p. 134; McNeill, Cassell, & Levy, 1993), or for *nominal establishment* (Bauer, 2014, p. 134). Thus, pointing can be figured as both a manual gesture (used either with or without speech), or as something much more linguistic, as seen through pronominal signs directed towards established locations which take on the form of pointing.

1.6.1. Pointing and pragmatics

Although one of the main functions of pointing is to establish joint attention between interlocutors (Liszkowski et al., 2012; Tomasello et al., 2005), this is not the only way that gestures of this type are used. In some cultural contexts, the manner in which a point is articulated may make a difference to its meaning. For instance, Wilkins (2003) notes that Arrernte speakers consistently indicate routes and directions with particular types of points, which contrast with those used to specify individual objects. Enfield et al. (2007) investigate formally distinct pointing gestures (i.e., S(small)-points and B(big)-points) in Lao, which correlate with the pragmatic functions of utterances, including the status of information produced by a speaker. This research shows that integrated vocal and visible signs are systematically organised in everyday talk, and that "a system of meaningful oppositions is as applicable to types of hand gestures as it is to types of words" (Enfield, 2009, p. 20).

Additional research across various language communities has found the height of pointing gestures to be an analogue for the distance to a referent (e.g., Le Guen, 2011a; Levinson, 2003; Wilkins, 2003). This "up is far" communicative rule (Bauer, 2014, p. 150) has only been reported in languages that preference geocentric spatial strategies, such as cardinal direction terms (e.g., *north*, *south*) (Levinson, 2003). It has also been reported in pointing signs among speaker/signers of Warlpiri and Warumungu (Kendon, 1988, p. 241) and signers of Kata Kolok (de Vos, 2012) and Yolngu Sign Language (Bauer, 2014, p. 150).

Most research in this domain has explored the influence of factors related to distance and the semantic qualities of referents on individuals' selection of *linguistic* tools (e.g., demonstratives) to express the position of entities in space (e.g., Rocca et al., 2019). However, research on the pragmatic functions of pointing gestures suggests that the *type* of point a person chooses to articulate is not arbitrary. Rather, its form has the potential to be dependent on the features of the referent to which it is directed, and the particulars of the interactional

context. The high level of sensitivity to pointing behaviour displayed by speakers in some communities provides valuable support for this notion. For instance, Wilkins (2003) outlines the conscious teaching and transmission of pointing gestures (pp. 201-207), where adults are reported to correct children who point the *wrong* way (in terms of direction and handshape).

Despite the capacity for spatial relationships to be expressed in all languages, the linguistic resources to do so vary considerably across language groups, and at times within communities. The following section addresses a key tool for the expression of spatial relationships; Frame of Reference (FoR), which is fundamental to cross-cultural studies on spatial description.

1.7 Spatial Frames of Reference ('FoRs')

Spatial relationships are expressed in all languages, through linguistic devices and/or the body. Research on the language of space has explored the diverse linguistic resources that people use to shape, and subsequently categorise, the space around them. A large body of research on language and spatial representations has utilised a variety of classification frameworks for spatial Frames of Reference (FoRs); a term that originated from Gestalt theories of perception in the nineteen-twenties (Levinson, 2003, p. 24). These coordinate systems are used to conceptually locate an entity ('figure') in relation to another entity ('ground') in space (Talmy, 1983),¹ which is achieved through the expression of relevant angular information. FoRs offer an invaluable strategy for describing how spatial conceptualisations emerge through language and embodied behaviour.

Various debates throughout the literature have led to controversies related to the ideal number of FoRs, their criteria, where the boundaries between them lie, and the meanings of

¹ Alternative terms include 'located object' and 'referent object' (Levelt, 1984), and 'referent and 'relatum' (e.g., Palmer, 2015).

particular terminologies (e.g., Bohnemeyer, 2011; Bohnemeyer & O'Meara, 2012; Danziger, 2010; Le Guen, 2011a; Lum, 2018). Some alternative FoR typologies have resulted from the MesoSpace research group (e.g., Bohnemeyer & O'Meara, 2012), and research conducted at the Max Planck Institute for Psycholinguistics (e.g., Levinson, 2003; Majid et al., 2004; Pederson et al., 1998). Levinson's (1996, 2003) foundational framework distinguishes three FoR types; relative, absolute, and intrinsic. In many languages, linguistic resources for multiple frames may be available to speakers. I will now outline Levinson's three-frame typology.

1.7.1. Relative FoR

Relative FoR (Levinson, 1996, pp. 369–371, 2003, pp. 43–47) expresses a ternary spatial relation, where the projected angle is separate from the ground. In this FoR, the viewer projects an egocentric search domain to express the relationship between the figure and ground based on their own viewpoint (e.g., *left, right*). As a result, the right side of the figure aligns with the right side of the viewer, who must specify their point of view and orientation in relation to the figure and ground. For example, the sentence *the dog is to the right of the truck* might not continue to be true if the viewer were to project a search domain from a different location within the scene (see Figure 1.1).

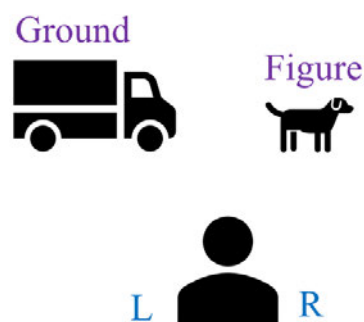


Figure 1.1. Relative FoR in 'The dog is to the right of the truck'

1.7.2. Absolute FoR

According to Levinson (1996, pp. 371–373, 2003, pp. 47–50), absolute FoR describes a binary relation between figure and ground. In absolute FoR, the projected angle is separate from the ground and is expressed using a geocentric, real-world orientation. Levinson and Wilkins (2006, p. 21) posit that everyday use of absolute FoR involves "fixed bearings that are instantly available to all members of the community." Within this frame, a search domain is projected according to a conceptual 'slope', which consists of fixed bearings or abstracted directions. For instance, the description *the dog is to the north of the truck* can be applied to the scene regardless of the viewer's position, as their point of view is irrelevant to locating the figure in relation to the ground (see Figure 1.2). Subsequent research has challenged Levinson's criteria for absolute FoR, and presents it as a ternary relation between figure, ground and external coordinates (e.g., Danziger, 2010; Le Guen, 2011a; Palmer, 2003, 2015).

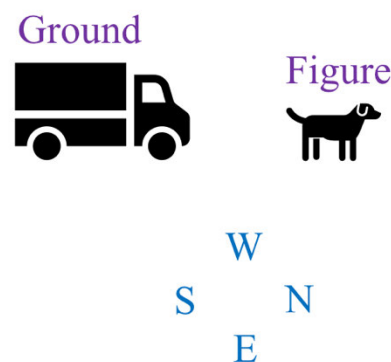


Figure 1.2. Absolute FoR in 'The dog is to the north of the truck'

Australian languages are considered archetypal in research on languages in which abstract cardinal direction terms (e.g., *north*, *south*) tend to dominate, and relative terms (e.g., *right*, *left*) are apparently absent (Levinson, 2003; Majid et al., 2004). Research on absolute FoR typically focuses on the distinction between absolute and relative spatial strategies. For instance, Levinson (2003, pp. 265–266) outlines several general features of absolute gesture

systems, "which are collectively distinctive compared to relative systems" (p. 265). These terms are often associated with pointing gestures, which duplicate or elaborate the verbalised directional information. In this field of inquiry, non-linguistic behaviour, such as gesture, is interpreted as evidence of the influence of language on cognition (Levinson, 2003).

However, some Australian languages do not contain devices related to absolute FoR in their linguistic inventories. Murrinhpatha is one such language, where instead of using terms which approximate cardinal directions, drainage-lines, or prevailing winds, speakers rely on intrinsic FoR, spatial deixis, place names, and complex pointing gestures for spatial reference (Blythe et al., 2016). We are only at the beginning of understanding the complexity of spatial description in Australian languages (Palmer et al., 2019).

Cross-linguistic variation in the use and understandings of cardinal directions also complicates analysis of spatial description in the Australian context (e.g., Gaby et al., 2017). For instance, the Australian Aboriginal language Kuuk Thaayorre features a cardinal system consisting of six directional roots, which relate to the banks of a local river with additional intersecting axes based on the trajectory of the rising and setting sun (Gaby et al., 2017, "'North' in Kuuk Thaayorre", para. 2). Additional examples include Guugu Yimithirr, which uses a quadrant system of four cardinals (Haviland, 1993, p. 5), and Warlpiri, which uses a system where absolute terms relate to relative positions between two absolute cardinal points (Laughren, 1978, p. 10).

Recent research has also revealed significant diversity in absolute systems used across Aboriginal Australia, where speakers often employ a number of (overlapping) systems (see Hoffmann, 2019, p. 8). Hoffmann (2019) underscores the importance of continued comprehensive research in this area, particularly in relation to the patterns of usage of absolute FoR and directionals, which have not received sufficient scholarly focus (p. 16).

Cardinal directions frequently occur in Gija conversation (see also Tsunoda, 1981, pp. 243-246 on a neighbouring language, Jaru), and are complex in that root directionals combine with affixes, which modify the root word to indicate additional information related to direction and distance (see also Gaby et al., 2017, on Kuuk Thaayorre). In Gija, terms related to absolute FoR are based on cardinal directions such as *boowoor* ('north'), and overlapping geocentric systems related to river-drainage and hillslope (e.g., *gendewa*, 'upstream/uphill'). The term *yilag* is used in absolute and intrinsic FoRs, as it carries the geographical implication of a trajectory moving down to water, down a hill, or simply 'down' or 'bottom'.

Kofod (2003) outlines that the close relationship between Gija spatial and directional words and the surrounding landscape of the East Kimberley "is typified by dramatic ranges cut by rivers which become raging torrents in the wet season then dry to a string of water holes in the dry season" (p. 42). The intimate connection between Gija country, the language, and its speakers is further demonstrated by the fact that common greetings in Gija often involve asking *Gabiya nida?* ('Where are you going?'), or *Gayibinya naniyinha?* ('Where did you come from?'), to which a recipient might reply: *Ngenengga ngenanka* ('I'm staying here'), or *Ngooloongooloon gerlirrang ngenayin Booroowoombiny* ('Yesterday I came from the west, from Broome') (Blythe, 2001, p. 9).

1.7.3. Intrinsic FoR

Intrinsic FoR (Levinson, 1996, pp. 366–368, 2003, pp. 41–43) involves an object-centred binary relation, where the anchor is within the ground and is thus allocentric. According to this frame, the search domain is expressed *without* reference to the viewer's perspective or external coordinates. Rather, it is communicated in terms of the inherent asymmetrical features of the ground (e.g., *its front*, *its back*). Thus, in the sentence *the dog is*

in front of the truck, the dog is understood as being located near the front aspect of the truck, which is true regardless of the viewer's position within the scene (see Figure 1.3).



Figure 1.3. Intrinsic FoR in 'The dog is in front of the truck'

Gija speakers use sagittal terms, some of which overlap with geocentric systems (e.g., *yilag*, 'down/downhill/bottom'). They also use other spatial relational devices (e.g., *lamban*, 'on the side of a hill'), which relate to intrinsic FoR.

1.7.4. Demonstrative use and a fourth FoR

Regardless of the language spoken, exophoric demonstratives (Halliday & Hasan, 1976) are frequently co-produced with pointing gestures during occasions of spatial description. Levinson (2018) notes that the close association between pointing gestures and demonstratives signals one of the most important functions of this class of words, which is to direct joint attention towards a referent of joint interest (p. 2; see also Levinson & Holler, 2014, p.3). This process highlights that both their production and comprehension is collaboratively achieved (Peeters & Özyürek, 2016).

Some research on spatial reference has adopted a focus on deixis, particularly in relation to demonstratives and pointing gestures. A significant point of contention is whether *linguistic* information is required to convey the spatial relationship between two entities according to FoR. As a result of this issue, Danziger (2010) has proposed a fourth, 'direct' FoR (cf. Le Guen, 2011a), which expands Levinson's three-frame typology by incorporating angular information expressed through verbal and embodied deixis. Diessel (2013) supports

this advancement, arguing that the existence of at least two contrastive demonstratives in all languages (and their prevalence in everyday conversation) makes them part of "the most basic coordinate system of both language and cognition" (p. 691).

Levinson (2003), however, maintains the redundancy of a fourth FoR because "specifications of the origin of the coordinate system within a frame of reference is one way in which deixis contributes to spatial descriptions of all types" (p. 71). According to this evaluation, demonstratives do not constitute relevant FoR systems, as in *most* languages they do not contain verbal angular specifications (see also Le Guen, 2011b, p. 908).

Danziger's (2010) four-frame typology categorises FoRs according to an allocentric-egocentric division (i.e., where the anchor is separate from the speech participant, or the speech participant converges with the anchor), and on the basis of whether they are binary or ternary (i.e., whether the anchor converges with the ground, or whether the anchor and the ground are distinct). From this perspective, grouping together FoRs where the ground is also the anchor in contexts where the ground is a speaker *and* when the ground is another object is problematic (Danziger, 2010, pp. 171-172).

According to the Levinsonian three-frame analysis the following sentences would be ascribed to the same intrinsic frame: a) *The dog is in front of the truck*; b) *The dog is in front of me*. Alternatively, Danziger (2010) suggests that on the basis of different rotation sensitivities, utterances such as these would in fact belong to different FoRs. That is, sentence a) would remain the same regardless of the speaker's position (intrinsic FoR), and sentence b) would not continue to be accurate (direct FoR).

Danziger's proposal also addresses the significance of pointing as a means of expressing angular specifications. It incorporates co-speech gesture due to similar rotation sensitivities in multimodal utterances where vector information is expressed via a pointing gesture, and anchor, ground and speaker merge (Danziger, 2010, p. 178). According to this

perspective, pointing gestures, which are often paired with demonstratives, provide relevant angular information for determining the relation between the figure and ground, just like their lexical counterparts (e.g., *right, in front of, south*).

Section 1.8 addresses current issues related to research on the language of space, focussing on how conceptualisations of space emerge through language and gesture, and the possibility of a causal or mediated link between the two modalities.

1.8 Linguistic Relativity and the Influence of Topographic and Sociocultural Factors

A large body of research on the language of space insists on a Whorfian connection between language and non-linguistic spatial thinking, which emerges through gesture (e.g., Levinson, 2003; Majid et al., 2004; Pederson et al., 1998). The linguistic relativity hypothesis (Sapir, 1921; Whorf, 1956/1939), where the structure of a language is said to shape speakers' cognition and world view, provides the theoretical basis of a perceived cross-modal correlation between FoR use in speech and FoR use in non-linguistic spatial tasks (i.e., gesture).

Some cross-linguistic research has classified differences between FoRs (particularly relative and absolute) as both linguistically *and* psychologically significant, thus assuming a correlation between cognitive FoR and linguistic FoR within the same spatial domain (e.g., Pederson et al., 1998). Levinson (1997) provides an example of this connection from an Australian Aboriginal community, where the necessary reckoning of space that Guugu Yimidhirr speakers accomplish during occasions of spatial description signals cognitive differences between speakers who use relative (egocentric) versus absolute (geocentric) FoRs (see also Danziger, 2010; Enfield et al., 2007; Haviland, 1998; Le Guen, 2011a; Levinson, 1997).

The influence of topographic and sociocultural factors on spatial reference presents a much more complicated view of how speakers interact with their environments when they construct spatial descriptions. In contexts of direction giving, Kita (2003) claims that Japanese speakers produce directionally accurate pointing gestures, which suggests an absolute orientation. However, directional points are often headed by embodied suggestions of visible features of the route, thus indicating that the direction expressed by speakers is contingent on mental maps of the path that are encoded in relative FoR (p. 60). This indicates that sociocultural and geographic environment may play a fundamental role in determining how speakers achieve spatial and locational reference, not just the structural affordances of the language.

Emerging research on the relationships between the physical environment and spatial strategies has signalled not only diversity across languages, but *within* communities. Individuals have been reported to employ tools for spatial description according to the specificities of their environment, socio-cultural context, and demographic factors (e.g., Bohnemeyer et al., 2014; Palmer et al., 2018a, 2018b). Furthermore, the influence of diverse socio-cultural and topographic factors on strategies for spatial description in small-scale rural indigenous communities (e.g., Meakins et al., 2016; Le Guen, 2011b; Lum, 2018) challenges claims of a Whorfian connection between language and non-linguistic spatial thinking (Levinson, 2003; Majid et al., 2004; Pederson et al., 1998).

Meakins et al. (2016) demonstrate the intricacies of community-internal variation in an Australian Aboriginal community as a result of inter-generational language change. Even after Gurindji youth have shifted to Gurindji Kriol (a mixed-language known to favour relative terms), speakers of this language demonstrate a continued reliance on absolute cardinal directions by producing directionally accurate points, despite the relevant lexical items being essentially absent from the language (Meakins et al., 2016). For speakers of

Gurindji Kriol, FoR used for verbally describing spatial relations does not necessarily align with FoR used in non-verbal tasks, as exemplified by pointing gestures.

Le Guen (2011b) provides an additional perspective concerning the influence of gender on the knowledge and use of spatial language in a Yucatec Maya community, which reflects cultural practices related to working in a field, as well as ritual discourse (p. 910). Although geocentric coordinates are *verbally* unavailable to women, analysis of gesture in 'nonverbal' tasks reveals a preference for geocentric coordinates in both women and men.

Other examples include a correlation between a preference for relative strategies versus absolute strategies by urban dwellers and island inhabitants of Dhivehi, respectively (Palmer et al., 2017), and the absolute versus relative preference of individuals from a Maldivian atoll as dependent on local subsistence strategies (Lum, 2018). The topographic correspondence hypothesis (Palmer, 2015) and sociotopographic model (Palmer et al., 2017) aim to capture the bidirectional influence between language and the physical environment, and the range of linguistic strategies that individuals prefer, depending on wide-reaching considerations such as demographic and environmental factors (Palmer et al., 2018b). Speakers of Australian Aboriginal languages which favour absolute FoR, including Gija, often choose between terms offered by numerous and overlapping geocentric systems, which invoke features of the surrounding landscape.

1.9 The Land, the Language, and its Speakers

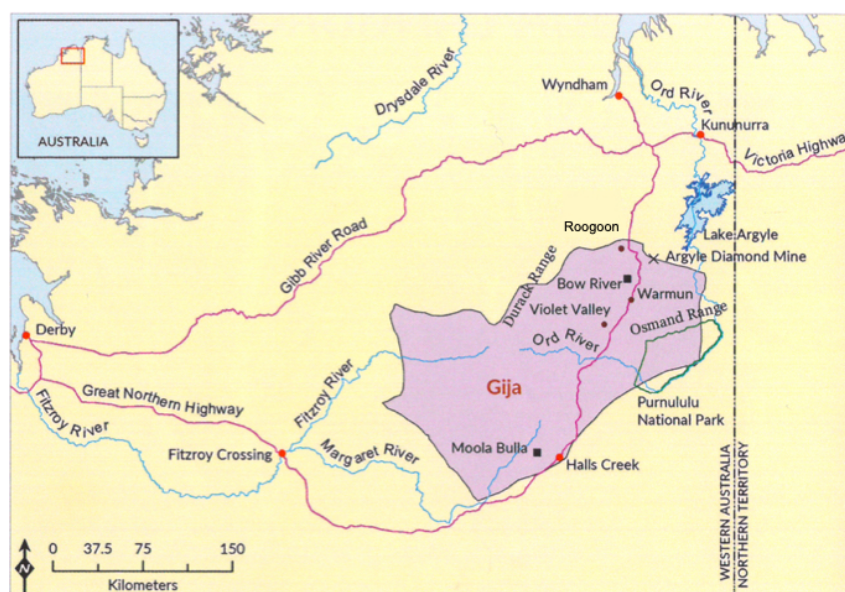


Figure 1.4. Map of Gija country (Purdie et al., 2018, p. 12)

The traditional country in which Gija is spoken spans from a region to the north of the Warmun Community around Turkey Creek, west to Landsdowne and Tableland stations, and just south of Halls Creek, including the majority of Purnululu National Park (see Figure 1.4; Kofod, 1996a, 2016). Traditionally, Gija speakers inhabited communities at Warmun (Turkey Creek), Frog Hollow (Woorrerenginy), Halls Creek (Yarliyl), Crocodile Hole (Roogoon), along the Bow River, Chinaman's Garden, and various other outstations in the east Kimberley. Today communities mostly live in and around Warmun, Halls Creek, and Kununurra.

Gija is a non-Pama-Nyungan language from the Jarragan family, which also includes Miriwoong and Gajirrabeng (Capell, 1940; McGregor, 1988). It is head-marking, features complex predicates, and is typically code-mixed with Kriol. Gija speakers recognise a minimum of two dialects that are spoken in and around Warmun and Halls Creek (Kofod, 2016). In Gija, the three grammatical genders *masculine singular*, *feminine singular* and *non-singular*, are overtly marked on all nominals, with gender concord spreading across nouns, adjectives and demonstratives via suffixal agreement (Kofod, 1998, p. 6). Gender concord

also extends to the objects of transitive verbs, to third person pronouns and to interrogative pronouns.

Today, Gija is an endangered language, and is not acquired as a first language or actively spoken by younger generations (Blythe, 2001, p. 1). Most speakers are elderly and are concerned about the future of their language. Younger generations speak Kimberley Kriol with some Gija vocabulary, including kinship terms, skin names, and swear words (Blythe, personal communication, 2019).

Early efforts to document Gija were made in the late nineteenth and early twentieth centuries (Kaberry, 1937; Ray, 1897), and the first in-depth phonological description of the language appeared in the nineteen-seventies when 'Summer Institute of Linguistics' (SIL) linguists Joyce Hudson and Peter Taylor produced an analysis of phonemes of the language (1971). In the following decade, linguist Patrick McConvell led a language maintenance programme at Ngalangangpum School in Warmun, during which various literacy materials and language lessons were produced for educational and language awareness programmes (McGregor, 1988, p. 35). Blythe's (2001) phrasebook and learner's guide to the language provides an additional educational resource.

Frances Kofod is responsible for the majority of work conducted on the Gija language, including a learner's grammar (1996a), accounts of speech act verbs (Kofod, 1996b), middle verbs (Kofod, 1997), and gender and number (Kofod, 1998), as well as a dictionary, which is scheduled to appear in 2020. Kofod also provided linguistic evidence for the *Miriwoong-Gajirrawoong Native Title Claim (Ben Ward & Ors v Western Australia & Ors [1998] FCA 1478*, 1998). In this case, explanation of the detailed knowledge of flora and fauna encoded in the vocabulary of east Kimberley languages assisted Miriwoong and Gajirrabeng people to establish their links to country, where applicants declared 'knowledge and use of language' as a means by which their claim could be substantiated (see Kofod, 2003).

Additional work includes the documentation of Aboriginal knowledge related to flora and fauna in the east Kimberley (Purdie et al., 2018), and painting stories accompanying artworks for which artists living in Warmun are particularly well known (see Crane, Kofod, & Hunt, 2016). Recent research has extended the semiotic reach of Gija. Frances Kofod's collaboration with the CIARA project (Conversational Interaction in Aboriginal and Remote Australia, <https://www.ciaraproject.com/>) and myself, has led to cross-linguistic analyses and a new focus on multimodal interaction, as observed in informal conversational data (e.g., de Dear et al., 2019).

1.10 The Present Study and Research Aims

This thesis draws on a corpus of informal conversational data to investigate geographically situated place reference in Gija. It uses FoRs as a tool to study practices used for place reference formulation, and examines *how* Gija speakers coordinate various spoken expressions with pointing gestures. A novel 'geospatial' approach to CA (as outlined in Chapter 2) enables close examination of situated place references and illuminates the intended meanings of pointing gestures, which target locations in the surrounding environment.

The aims of this study are exploratory. First, a descriptive quantification of linguistic and embodied place reference practices will be reported on (Chapter 3). Following this, a small set of other-initiated repair (OIR) sequences will be analysed with the addition of geospatial imagery in order to zoom in on how speakers publicly demonstrate their spatial knowledge in the domain of place reference (Chapter 4).

Chapter 2 Methodology

2.1 Design and Approach

This study employed a descriptive mixed-methods design. Descriptive quantitative analyses were carried out using a coding scheme developed by synthesising CA and multimodal concepts, and FoR theory. This generated frequency counts of place reference practices in Gija interaction, and facilitated a focus on the frequency and use of linguistic forms, as well as pointing gestures used to formulate references to place. Descriptive qualitative analyses of other-initiated repair (OIR) sequences enabled investigation of the ways that interactants combine talk and pointing behaviour to repair problematic references to place in a context where issues related to place are topicalised in the interaction.

A range of methods from Conversation Analysis (CA; Schegloff, 2007; Sidnell & Stivers, 2013), Interactional Linguistics (IL; Couper-Kuhlen & Selting, 2018; Selting & Couper-Kuhlen, 2001), and Multimodal Analysis (MA; Stivers & Sidnell, 2005) were used to show how participants manage references to place in interactional contexts. These methods guided analysis of participants' talk and visible bodily behaviour in the controlled context of OIR. Analytic validity was secured by the 'next-turn proof procedure' (i.e., by showing how recipients respond, or not, and what happens next in the interaction).

In accordance with the methodological approach of CA, this study used a corpus of informal conversational data and transcripts to generate data-driven theories and understandings of the social world of participants (Hepburn & Bolden, 2017, p. 3). This was augmented with an innovative 'geospatial' approach to investigate the wider domain of talk by incorporating the geographical context in which situated pointing and place reference occurred.

Field trips to Warmun were funded by Macquarie University (MQNS 9201601314), the Australian Research Council (DP180100515), and the AIATSIS Dictionaries Project. My

place on the July 2019 fieldtrip was supported by the MRes Year 2 budget from Macquarie University. This study was granted approval from the Macquarie University Human Research Ethics Committee (reference: 5201919198349), and was conducted in accordance with this approval (see Appendix C).

2.2 Participants

All participants were elderly women, which reflects the endangered status of the language. The participants have known each other for most of their lives and spend extended periods of time together on a daily basis. Demographic information appears in Table 2.1.

Table 2.1
Demographic information of the participants

Number	English name	Gija name	Skin name	Age	Gender	Primary language
1	Mabel Juli	Wiringgoon, Bardngarri	Nyawoorroo	85	F	Gija
2	Phyllis Thomas	Booljoonngali	Nagarra	Deceased	F	Gija/Jaru
3	Eileen Bray	Joomena	Naangari	70s-80s	F	Gija
4	Shirley Drill	Dardayal, "Yoorladal"	Nyawoorroo	70s-80s	F	Gija
5	Helen Clifton	Garnanil	Nyawana	73	F	Gija

2.3 Corpus Materials

Data were selected from an existing corpus, which comprises 18 hours of video-recorded conversations conducted in Gija. Frances Kofod has transcribed and translated approximately 4.5 hrs of this corpus (with some additional transcription produced by Anna Crane, Joe Blythe, and myself). Native Gija speakers assisted with this process during field trips to Warmun. The sub-corpus for this thesis was selected from material that Frances Kofod

has interlinearised in Toolbox. I provided further detailed transcription of 66 minutes of data (see Table 2.2) for the purposes of this thesis.

Table 2.2
Sub-corpus material

Recording code	Speakers	Duration (mins:secs)	Location
20160607JB_01	Mabel Phyllis Eileen	15:17	Mirrilingki
20170426JB_01	Mabel Phyllis Shirley Helen	39:25	Bow River jump up
20170422JB_02	Mabel Phyllis Eileen	11:41	Mirrilingki
TOTAL: 66:00			

2.4 Data Collection

The materials used in this thesis were recorded at Mirrilingki and Bow River jump up, between 2016-2017, by Dr Joe Blythe. During the July 2019 fieldtrip, I assisted with another recording (see Figure 2.1). At each recording site, a Global Positioning System (GPS) was used to record the location and camera bearings in degrees.



Figure 2.1. Recording set-up, outside Warmun, 2019
(photograph taken by the author)

Recording locations were selected to reflect the basic, primordial interactional setting for most Gija people, who conduct the majority of their everyday interactions outside. During recording, participants were left to talk without disruption. Figure 2.2 shows a range of typical sitting positions.



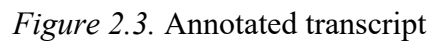
Figure 2.2. Sitting positions during recording

2.5 Transcription

Representing interactions through the transcription process provides the basis for analyses and descriptions, and has made interactional phenomena empirically observable (Moerman, 1988). Due to the limited scope of this study, transcripts are geared towards visually enhancing the details of place reference formulations, leaving other moments in the interactions less granular. Transcription of speech is based on Jeffersonian conventions (Hepburn & Bolden, 2017; Jefferson, 2004) (see Appendix B, Table B1) and transcription of visible bodily behaviour has been adapted from Mondada's conventions (2016) (see Appendix B, Table B2). Despite current trends in multimodal (and multisensorial) approaches to transcribing multiactivity and the ways in which participants sensorially engage in their surroundings (Mondada, 2019), this study restricts the transcription of activities to those that are relevant to participants within the topic of place reference. Transcripts are not intended to represent the scenes of the interactions in their entirety. They are presented as incomplete artefacts, shaped by the researcher's observations (Labov, 1973). They are intended as a resource should the data be revisited, and analyses expanded.

2.6 Data Annotation and Analysis

Eudico Linguistic Annotator (ELAN) (Sloetjes & Wittenburg, 2008) provided the platform for data annotation. Place references were selected according to the 'sequential (natural) control method' (Dingemanse & Floyd, 2014; Enfield et al., 2013; Stivers et al., 2009) and collection-based conversation analytic procedures (Schegloff, 1996a) to ensure a controlled environment for analysis, and to enable future cross-linguistic comparisons of conversational phenomena. Figure 2.3 illustrates how the transcripts are organised.



The coding scheme for pointing gestures was informed by existing methods and developed by Dr Francesco Possemato and myself to accommodate the specificities of the study at hand, and to provide a rich description of pointing gestures for analytic purposes. First, points were grouped according to two broad categories depending on whether they were produced with the head or a hand, and were annotated as such in dedicated 'head' or 'hand' tiers in ELAN. Then, the alignment between points and parts of speech - particularly different types of demonstratives - was recorded in order to analytically investigate the specific temporalities associated with pointing gestures and the sequential environment in interaction (i.e., the *position*). Table 2.3 shows the categories for describing the *composition* of manual pointing gestures (in terms of their size, manner of articulation, orientation, direction, and motion), and Table 2.4 shows the categories for describing the composition of head points.

Table 2.3
Coding scheme for the composition of manual points

Size	Articulator	Orientation	Direction	Motion
big (arm extended)	index finger	sagittal (longitudinal plane)	elevated	sweeping (single motion)
small (arm not extended)	two-finger (1st + 2nd fingers) *3F, 4F also possible	axial (horizontal plane)	up/down	fluttering (continuous)
	thumb	parasagittal (diagonal)	behind (the speaker)	<ul style="list-style-type: none"> flap flick
	hand (fingers adducted)	palm-f/palm-b (front/back)	in/out (towards/away from speaker)	tap
	open hand (fingers relaxed)			wrist flexion (acute angle of wrist bent towards inner arm)
	object (e.g., OBJ-stick)			wrist rotation
				circular

Table 2.4
Coding scheme for the composition of head points

Part of head/articulator	Motion
lip	
gaze (sustained, inferred from head orientation)	
chin (upward head movement leading with the chin + eye gaze)	
head (downward head movement + eye gaze)	nod (front)
	turn (whole head pivot)

Enfield and Sidnell's (2017) practice-based approach to the analysis of situated social action guided the method for coding place references in terms of their composition, position, and context. Spoken place references were coded according to the practices that will be discussed in Chapter 3: *place names*, *absolute FoR and geocentric terms*, *demonstratives*, *intrinsic FoR and spatial relational terms*, and *landscape terms*. Place references were then coded according to their production in *initial* or *subsequent* position (following Sacks &

Schegloff, 1979). Lastly, place references that occurred in the context of OIR were extracted to form a set of single case analyses.

2.7 Geospatial Methods

Previous research on embodied behaviour in Aboriginal Australia has demonstrated that Aboriginal people from various communities across the country represent geographical directions and features of the landscape with great spatial accuracy, through speech and gesture (e.g., Haviland, 1993; Wilkins, 2003), and "dynamic story-telling practice[s]" (Green, 2014b, p. 220). With regard to pointing gestures, Levinson (2007) indicates the 'directional veracity' of absolute points (p. 44). To examine this issue, an innovative 'geospatial' approach to extrapolating vectors and situating pointing gestures was developed (see Figures 2.4a-c).



Figure 2.4a Still from geo-located videorecording

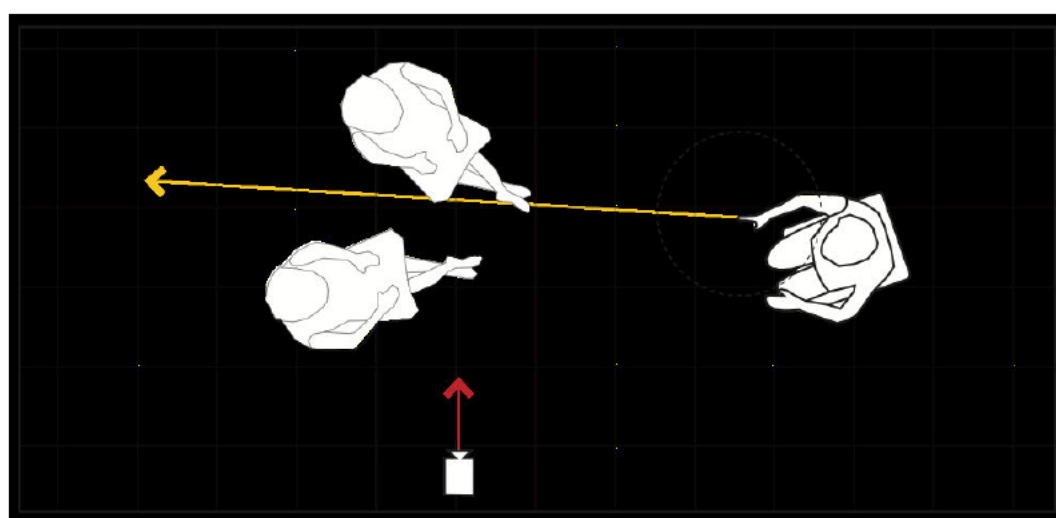


Figure 2.4b Extrapolated point vector (yellow arrow) and camera bearing (red arrow)

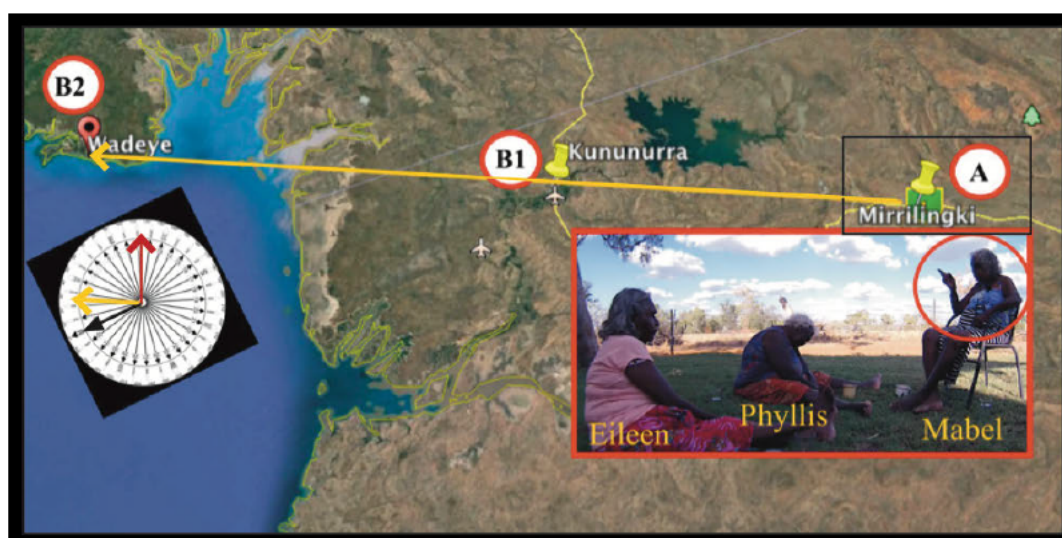


Figure 2.4c Geospatial data overlaid onto satellite imagery showing point vector (yellow arrow) and camera bearing (red arrow), relative to north (black arrow)

For each place reference + point move, camera bearings and GPS data from the recording locations were entered into Google Earth to enable the alignment of satellite imagery with the actual direction of pointing gestures. The vectors of points were measured with the 'ruler' tool in Google Earth. The angles of these vectors were then matched to compass coordinates, which were calibrated to the camera bearings from the recording locations.

Geospatial information provided a means of mapping occasions of place reference onto actual geographical space, and brought some of the interactants' shared knowledge about the country into an otherwise conventional interactional analysis. Situating pointing gestures revealed the geographical complexity of locational expressions necessary for analysis, and enhanced the ethnomethodological angle of the study, which emphasises the embedded and situated nature of interaction.

Chapter 3 Place Reference and Pointing Practices

This chapter provides an exploratory, descriptive quantification of place reference practices in Gija interaction. It focuses on the frequency and use of linguistic practices, and the forms of pointing gestures used to formulate references to place.

3.1 Place Reference Practices

Gija speakers use a wide range of place reference practices that pave different conceptual paths to a target. This analysis focuses on **place names**, **absolute FoR** and **geocentric terms** (i.e., cardinal directions, hillslope, and riverine terms), **demonstratives**, **intrinsic FoR** and **spatial relational terms** (e.g., terms that locate a part of a target entity, such as its *top*, or its *side*), and **landscape terms** (i.e., landmarks and features of the natural environment). These categories emerged in the collection of place reference instances in the data. All of these linguistic practices were produced alongside **pointing gestures** (to varying degrees), which restricted the search domain for addressees. Table 3.1 shows the totals of place reference practices in initial and subsequent positions across 93 place references identified in the data.

Table 3.1
Totals of linguistic practices in initial and subsequent references to place

	Place names	Absolute FoR (geocentric)	Demonstratives	Intrinsic FoR (spatial relational)	Landscape terms
initial	4	22	27	4	4
subsequent	11	20	35	12	7
total	15	42	62	16	11

3.1.1. Place names

Place names are highly recognitional signifiers for individual, nameable places (cf. proper names in person reference). Many Gija place names are fundamentally locative as they commonly end in the locative marker *-n* or *-e* (Kofod, 1996, pp. 18-19). In the data sample, place names provide an effective solution for mostly subsequent references to place (see Table 3.1), and are not typically synchronous with pointing gestures. Speakers of other languages, such as Kula, are reported to use place names for unmarked *initial* reference (Williams, 2017), which is comparable to the use of personal names for initial person reference in other languages (p. 571). In the Gija data, place names provide a stand-alone reference strategy five times. When combined with other terms, it is the first constituent only twice, and occurs after a demonstrative, geocentric or spatial relational term, eight times. To summarise, speakers often combine place names with other terms, and when this happens, they are usually positioned *last*.

Place names have an important social function as they invite recipients' recognition of the place that is being talked about as somewhere that they are familiar with (following Schegloff, 1996, p. 440). Despite not necessarily adhering to the principle of *minimisation* (e.g., Enfield, 2012; Enfield & Stivers, 2007; Sacks & Schegloff, 1979), the selection of maximally recognitional practices reflects the nature of reference and language use more broadly as a joint action (e.g., Clark, 1996).

Extract 1 illustrates the use of a place name that is familiar to the interactants. Prior to the beginning of this extract, Shirley light-heartedly suggests that the group of elderly women should climb up a hill to the west. Mabel then provides an explicit, subsequent reference to this place by means of its Gija name (*Deroorr*, 'Black Rock').

(1) Black Rock (20170426JB_01_000227_000231)

1 +(0.7) (0.2)
 mhe +.....gaze-W->
 2 Mab gerlirra:ng ngoo:rrinya- (0.3)
 gerlirrang ngoorroo-ny-a
 from_west DIST.DEM-M -TOP
 That one coming from the west,
 mhe ----->
 3 Mab mAnbe-nga:rri ngi:nji deroorrji.
 manbe-ngarri nginji deroorr -ji
 black-SUB 3sgmS-be/stay PRES-3sgmS place_name-TOP
 the place called Black Rock that is black.
 mhe -----,,,,,,,,,,>>

It is also possible for speakers to refer to a nameable place without explicitly naming it. Interactants consistently refer to Halls Creek using *yilag* ('down') or *nyoowool* ('south'). Although *nyoowool* is a logical strategy (Halls Creek is geographically south of Warmun), the use of *yilag* is less straight forward as Halls Creek is of higher elevation than Warmun. Extract 2 illustrates this implicit referential practice.

(2) To the south {Halls Creek} (20160607JB_01_000204_000207)

1 (0.2)+(0.3)
 mha +.....>
 2 Mab dan: ya:gengewa:rriny biri berrrayindoo nyoowool. h+hh
 da -n yagenge-warriny biri berrrayin -doo nyoowool
 DEM-NS other -two return 3nsS-go/come PAST-IPF-DU south
 Those other two went back to the south {to Halls Creek} hh
 mha point-south,,,,,,,,,,,,,,,,,,,,,,,,,,,,,+
 3 (1.6)
 4 Mab Mtk
 Mtk

Extract 3 demonstrates another function of place names, that is, the use of a place name as a means of person reference. This intertwined referential practice refers to person by virtue of the place from which they hail, and underscores the high level of awareness Gija people have of their surrounding topography (e.g., Kofod, 2003).

(3) A country owner and another one from Fitzroy (20170426JB_01_002355_002403)

1 Phy -> Δngenengga yAWOOr#oogboongarriya
 ngenengga yawoorroogboo -ngarri-iya
 PROX.LOC become_person who_lost_sibling-SUB -INTENS
Here where you have no little brother the one who died
 pha Δ...-----#point-SSW,,,,,>
 fig #fig.1

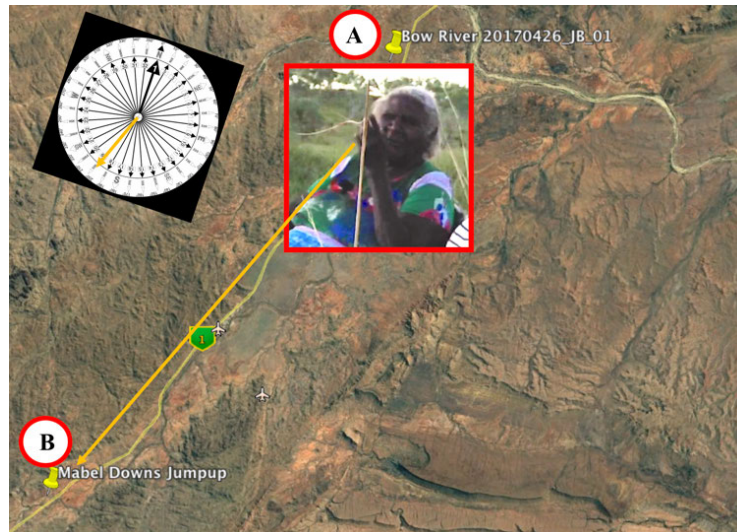


Figure 1. Phyllis points SSW, to Mabel Downs jump up

2 Phy nidaΔ gendang Δjambab Δjen mabel down [jambab.]
 nida gendang jambab -jen Mabel-Down jambab
 2SG.S-go/come PRES from_upstream jump_up-LOC place_name jump_up
coming down from Mabel Downs jump up.
 pha ,,,>Δ Δ#point-SSWΔ
 fig #fig.2

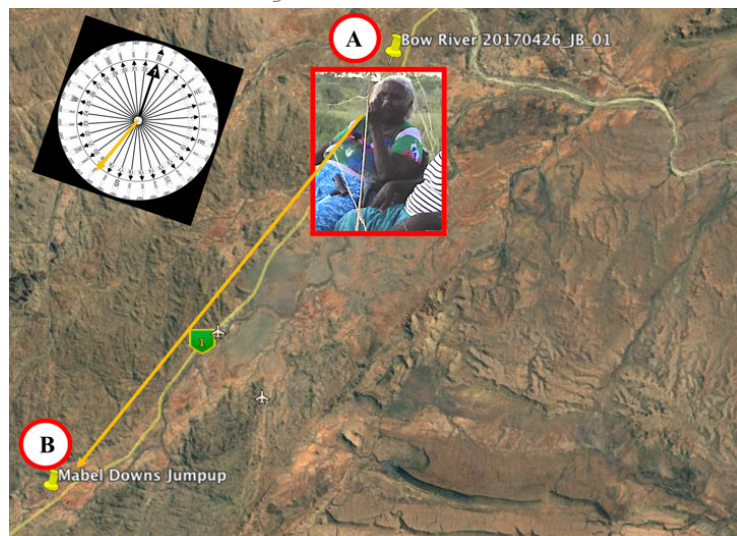


Figure 2. Phyllis points SSW again, to Mabel Downs jump up

3 Hel [#a::#]ng:i_yi,
 aa ngiyi
 ah yes
Ah, yes

4 (0.2)

5 Hel #mm:m?#
 #mm:m?#

6 Phy -> ngenengga dAAwa°noo,°
 ngenengga daawa -noo
 PROX.LOC country_owner-3SG.BEN
 This one here was a country owner

7 (0.2)

8 Hel #mm:m?#
 mm:m?

9 (0.4)

10 Phy -> h- aa: Δnge#nengga: (mgh) Δ fitzroy na[tha wan.
 aa ngenengga Fitzroy natha wan
 ah PROX.LOC place_name other one
 h- aa: and here another from Fitzroy {crossing}
 Δ...#pt-WSW,,,,,,Δ
 #fig.3

pha
 fig

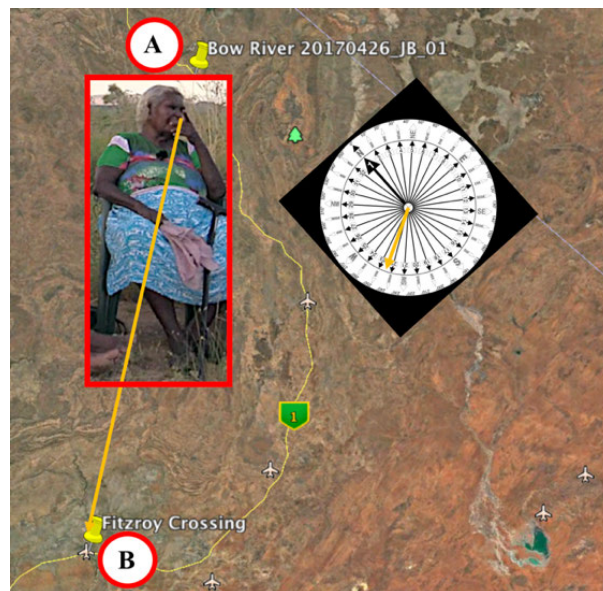


Figure 3. Phyllis points to Fitzroy Crossing

Extract 3 belongs to a longer narrative. At this point in the story, Phyllis is introducing two new protagonists. She begins with a place reference (*ngenengga*, 'here' + point, south-south-west to Mabel Downs jump up, see Figure 1), which is elaborated through her specification that this person is deceased (lines 1-2). Rather than overtly naming this person, circumspect reference is achieved by naming the place of their passing (Mabel Downs jump up), and directing two manual points towards this target (see Figures 1 and 2). The protagonist is recognised by Helen, who provides an affirmative response token (*aa ngiyi*, 'ah yes') at line 3, in overlap with the specification of the *jambab* ('jump up'). At line 6, Phyllis continues to

expand her person reference, by stating that this person was a country owner. Although the country in question is not specified, it may be used in this context contrastively to indicate that this person was Gija, as opposed to the second protagonist whose country is made explicit. At line 10, Phyllis introduces the second protagonist by referring to the place from which they hail (Fitzroy {Crossing}), and directs a manual point to the west-south-west (see Figure 3).

3.1.2. Absolute FoR and geocentric terms

Terms associated with absolute FoR, including geocentric systems, are pervasive in Gija conversation and constitute the 'dominant' FoR of this language. Speakers routinely refer to entities in their immediate and distal surroundings using terms afforded to them through this FoR. Unlike relative coders (who project an egocentric search domain, using words such as *left* and *right*), if a Gija speaker were to describe the position of a nearby woman as *ngelamoogoo* ('to the east'), this formulation would be considered ordinary.

42/93 place references feature either an isolated *geocentric term* (used here in relation to cardinal directions, river-drainage, and hillslope systems) (5), or multiple geocentric terms (37) in both initial and subsequent position (see Table 3.1). Participants frequently combine these terms with others to refer to places. On the four occasions where a geocentric term is used to formulate a repair solution, it is combined with other terms. Observations suggest a tendency for less specific forms such as demonstratives, spatial relational terms, and landscape terms to occur *before* geocentric terms (30) in complex formulations involving multiple strategies. Tables 3.2 and 3.3 present attested Gija cardinal directions and geocentric terms relating to river-drainage and hillslope respectively.

Table 3.2
Cardinal direction terms

Meaning	North	South	East	West
base form	<i>boowoor</i>	<i>nyoowool</i>	<i>ngela</i>	<i>gerliyirr</i>
locative	<i>biyirrin</i>	<i>nyoowooloo</i>	<i>ngelmin</i>	<i>girliyirrin</i>
allative	<i>boowoorroogoo,</i> <i>boorroogoo</i>	<i>nyoowooloogoo</i>	<i>ngelamoogoo</i>	<i>gerlirroogoo,</i>
allative + (‘further on’)	<i>boorrgoorloorr,</i> <i>boowoorrgoorloorr</i>	<i>nyooloogoorloorr</i>	<i>ngelagoorloorr</i>	<i>gerlirrijarriny</i>
ablative	<i>biyoorroong,</i> <i>booyoorroong,</i> <i>biyirri-biny</i>	<i>ngerig,</i> <i>ngerijibiny,</i> <i>ngerijen</i>	<i>ngelmibiny</i> <i>ngelmang</i>	<i>gerlirrang</i>
Swinging around from south- north/north- south		<i>ngerijingarriya</i>	<i>galmang</i>	<i>gerlirringarri</i>

Table 3.3
Geocentric terms relating to river-drainage and hillslope

Meaning	Up(stream, hill)	Down(hill)	Downstream
base form	<i>gendewa,</i> <i>gendewag,</i> <i>gendoowa,</i> <i>gaande</i>	<i>yilag</i>	<i>yoorloo</i>
allative	<i>gendewagoo</i>	<i>yilangoogoo</i>	<i>yoorloongoogoo</i>
allative + (‘further on’)			<i>yoorloongoojarriny</i>
ablative	<i>gendang,</i> <i>gendang-biny</i>	<i>yilang</i>	<i>loonggoong</i>

On the basis of morphology and usage in the data, terms used to denote river-drainage and hillslope, which project an angle using geocentric orientation, seem to overlap. That is, words meaning ‘up’, ‘upstream’ and ‘uphill’ appear to converge, as do words meaning ‘down’ and

'downhill'. The convergence of 'up' and 'uphill', and 'down' and 'downhill' may reflect the undulating topography of Gija country. Words signifying 'downstream', however, remain distinct. This presents an important analytical issue, as speakers use terms such as *yilag* ('down/downhill/bottom') to describe entities that can be theoretically explained using both absolute and intrinsic FoRs (i.e., in relation to a projected angle expressed using geocentric orientation, or the inherent *bottom* facet of a ground object). This observation can make it difficult to analytically delimit FoR boundaries in Gija.

Extract 4 illustrates a typical place reference featuring a cardinal direction term (*gerliyirr*, 'west'), headed by a demonstrative (*ngoorroon*, 'over there'). In this case, pointing is performed with an open hand (see Figure 4) and gaze direction (see Figure 5).

(4) To the west (20170426JB_01_000223_000225)

```

2 Shi      %[.Hh] B A#A r d ya[rrern ]%ngoorroo%n #gerliyirr,
           baward yarr-ern          ngoorroo-n gerliyirr
           climb lnsincS-say/do PRES DIST -LOC west
           .Hh we all climb over there to the west,
sha        %.....#hand point-WNW,,,,,,,,,,,,,%
she        %.....#gaze-WNW---->>
fig        #fig.4                                #fig.5

```



Figure 4. Shirley points west-north-west



Figure 5. Shirley gazes west-north-west

```

3 Hel      [.Hh]                                [eh:::ç]
           .Hh                                  yeah:::ç

```

3.1.3. Demonstratives

Gija speakers frequently use demonstratives to refer to a target location without describing its features in detail. Kofod's earlier work proposed a three-way demonstrative system based on proximal, medial, and distal space (1996a, p. 58). However, in light of accumulating conversational data and recent evidence, our understandings of this paradigm are shifting (Blythe & Kofod, personal communication, September, 2019, see Appendix A). Table 3.4 proposes an alternative understanding of Gija demonstratives. It presents terms that are frequently used to formulate place reference in the data and is by no means exhaustive. It includes Kriol terms due to their frequency of production.

Table 3.4
Demonstratives

Proximal			Distal		‘Recognitional’ (prev. ‘medial’)	
		Gija	Kriol	Gija	Kriol	Gija
singular	M	<i>nginy, nginyjiny</i>	<i>dijan,</i>	<i>ngoorroony</i>	<i>tharran</i>	<i>dany</i>
	F	<i>ngel, ngelel, ngenel</i>	<i>dij, dis</i>	<i>ngoorrool</i>	<i>that/jet/det</i>	<i>dal</i>
non-singular		<i>berrem</i>	<i>dijlat</i>	<i>ngoorroom</i>	<i>thetlat</i>	<i>dam</i>
adverbial		<i>berra, ngenengga, ngenenengga, ngenenggayana</i>	<i>hiya, dijei</i>	<i>ngoorroon</i>	<i>deya, theya, tharrei</i>	<i>dan</i>

Demonstratives are the most frequent terms produced in the data. Most place references involve a demonstrative of some description (62/93), in both initial (27) and subsequent (35) position (see Table 3.1). Participants show a tendency to combine demonstratives with other terms to provide additional information about the target location (50/62), and when this happens, the demonstrative is usually the first constituent of the move (42/50). Extract 5 illustrates this practice, as Mabel refers to the place of her campsite by

producing distal *ngoorroon* ('over there'), followed by a manual point to the south-east, and then geocentric riverine term *yoorloo* ('downstream').

(5) Where we camped (20170426_JB01_001523_001525)

```

1 Mab      ngoorroon +dErrerrebgarri yarraniyin+
           ngoorroo-n   derrerreb-ngarri yarra-niyin
           DIST      -LOC make_camp-SUB   lnsincS-be/stay_PAST
           When we camped over there
mha                +.....point-SE,,,,,,,,,,+
2             yooloo.
           yoorloo
           downstream
           downstream

```

In Gija, motion between locations is morphologically marked by two productive suffixes *-yoorroong* ('allative') and *-biny* ('ablative'), and by two enclitics =*mili* ('hither') and =*gili* ('thither'). The enclitics foreground the interactional 'here-space' (Enfield, 2003, p. 89), whereas the allative and ablative suffixes foreground the 'there-space' (i.e., 'not here', see Cutfield, 2018, p. 91), which is indicated by the base onto which these suffixes are attached.

Another dimension of place reference formulation concerns language choice. In the data, eleven demonstratives were expressed in Kriol, three were expressed in English, and the rest were produced in Gija. Kriol and English were not used for terms relating to absolute or intrinsic FoR. Rather, these terms were consistently produced in traditional Gija. This suggests that speakers may be more flexible in their choice of language when producing demonstratives, yet restrict their language use in the domain of spatial FoRs, which are more closely related to the environment and rely on fixed bearings or external coordinates (absolute FoR), or the inherent facets of a ground object (intrinsic FoR).

3.1.4. Intrinsic FoR and spatial relational terms

Gija speakers use intrinsic FoR and spatial relational terms to refer to entities in space in terms of their inherent features (e.g., *lamban*, 'the **side** of the hill'). The distinction between an object-centred relation (intrinsic FoR) and a ternary relation between figure, ground and external coordinates (absolute FoR) is unclear at times, as speakers sometimes use terms that overlap with geocentric systems (see section 3.1.2). Table 3.5 provides an exemplary list of intrinsic FoR and spatial relational terms.

Table 3.5
Intrinsic FoR and spatial relational terms

Meaning	Gija
ahead	<i>welangen, woolangen</i>
middle	<i>belegan, belegawirrin</i>
behind	<i>bardoon, bardoo-wardoo</i>
side way/on side/side edge	<i>limbalbiny, thayin, lirring,</i>
beside	<i>yagebayoorroong</i>
inside/underneath	<i>yiligin</i>
down/bottom	<i>yilag</i>
along the bottom/underneath	<i>yiligibiny</i>
side of hill	<i>gawalalanygarre, lamban</i>
up/upward/top/high	<i>goorloorroogoo, gawarabaran, gerloowoorr, laarne</i>
hilltop	<i>wirli, wirlinyin, wirli-wirlin</i>

Intrinsic FoR and spatial relational terms occurred in sixteen place reference formulations in initial (4) and subsequent (12) position (see Table 3.1). These terms occurred in isolation only twice in the sub-corpus, and were more commonly combined with other

terms, particularly those associated with absolute FoR (10). Of the fourteen formulations that combined these terms with others, the majority featured a spatial relation term that was headed by a demonstrative (10).

Extract 6 demonstrates a combination of referential forms, including use of deictic motion clitic =*gili* ('thither') with distal demonstrative *ngoorroom* ('that one'), and a coincident manual point. It also features sagittal term *laarne* ('up/top/high'), which further specifies an inherent feature of the target entity (a hill). In this extract, Shirley and Helen are joking about what they should talk about, what they want to do, and where they should go.

(6) I want to climb up on top (20170426JB_01_000234_000239)

```

1 Shi      *he [he::yi! ]
            ((laughter))
    hha      *...>
2 Hel.      [ngayindi] gerlirroogoo*
            ngayin-di gerlirroogoo
            I/me -TOP to_west
            Me, I want
    hha      point-W---,,,,,,,,,,,,,*
3 Hel ->    berdijboo ngin*biyan ngoorroomagili la*arne.=
            berdijboo nginbiyan          ngoorroo-m -a =gili    laarn-e
            climb    lsgS_FUT-go/come_FUT DIST.DEM-NS-TOP=thither top -LOC
            to climb up on top of that one to the west.
    hha      *.....point-W,,,*,
4 Shi      =°Yeah.°
            Yeah

```

3.1.5. Landscape terms

Gija speakers use landscape terms to refer to features of the natural environment (e.g., bottle trees, hills, sand). Eleven landscape terms were produced in the data. Although relatively infrequent when compared to the use of demonstratives and geocentric systems, these terms were used to anchor a reference on a feature of the natural environment in both initial and subsequent references to place (see Table 3.1). These terms occurred alone twice, but more commonly supplemented other terms (9).

In Extract 7, Phyllis begins a story with a description of the natural environment in which she was sitting when the events unfolded. This extract illustrates reference to a feature of the landscape (*ngayawarl*, 'sand', line 3), which contributes a geographical anchor to a target location that emerges later in the conversation.

(7) On the river sand (20170426_JB_01_000412_000415)

- 1 Phy .HHh [wayiniyana roord ngenaniyinde] (0.2)
 wayiniyana roord ngenaniyinde
 like_that sit 1sgS-be/stay_PAST-CONT
 .HHh I was sitting there like that along the side coming
- 2 Shi [((untranscribed))]
 ((untranscribed))
- 3 Phy -> (k)gerlirrangbiny ngayawarle, mm?
 gerlirrang-biny ngayawarl-e
 from_west -ABL sand -LOC
 from the west on the river sand, mm?

This place reference is further elaborated in Extract 10 (Crocodile Hole-1), with a focus on how interactants manage problems related to place. Despite the geographical specificities of Phyllis' reference (*gerlirrangbiny ngayawarle*, 'coming from the west on the river sand'), her addressees fail to recognise the target location and hold her accountable. Subsequently, an OIR sequence emerges, which temporarily suspends the progressivity of talk.

3.2 Pointing Practices

Gija speakers frequently point to refer to places. In this data set, pointing is typically co-produced with talk (i.e., the linguistic practices previously discussed). On four occasions, however, an isolated pointing gesture answers a *where*-question, which constitutes an information request. Although participants also point to refer to people or other entities, this analysis focuses on pointing as a means of referring to places. Table 3.7 shows the distribution of pointing gestures produced with a hand/multiple fingers, a single finger, or the head, in place reference formulations.

Table 3.6
Distribution of pointing gestures in place references

Hand/fingers	Single finger	Head
21	30	42

Hand/fingers: These points are produced with the whole hand or more than one finger, and sometimes with an object in hand. They commonly coincide with demonstratives, indicating a distal target (e.g., *tharrei*, (Kriol) 'that way/over there'). Although, on two occasions hand/finger points coincide with proximal *ngenengga* ('here'). Another coincident linguistic practice is the use of geocentric terms associated with absolute FoR (e.g., *boowoorryoorroong*, 'to the north'; *yoorloongoogoo*, 'going downstream'). Interactants produce points of this type in the vicinity of place names three times - two of which are implicit references to Halls Creek (*yilag*, 'down'). These points are also used to denote plural referents at a particular location (e.g., *ngaboogany doo gooragal-doo*, 'his father and mother' + two-finger point).

Single finger: These points are overwhelmingly produced with an index-finger. Only one single finger point is produced with an alternative finger (a thumb) to indicate a location behind the speaker (*Gananara*, 'Kununurra'). Single finger points frequently coincide with geocentric terms (e.g., *ngelmibiny*, 'from the east'; *yoorloo*, 'downstream'), including an implicit reference to Halls Creek (*nyoowool*, 'south'), demonstratives (e.g., *ngoorroon*, 'over there'), and spatial relational terms associated with intrinsic FoR (e.g., *laarne*, 'on top'). Although not strictly place reference formulation, interactants also use single finger points to refer to a person/group of people who are known to inhabit a particular place (see also Levinson, 2007, pp. 44-45; Sicoli, 2016, pp. 189-191). On these occasions, pointing

to a home base achieves person reference, and reveals an entanglement of referential strategies. Extract 8 illustrates this practice.

(8) Port Keats mob (20160607JB_01_000940_000947)

```

1 Mab      doo [doo] doodoo doodoo deg yirr[an li=
              deg yirrani
              see lnsexS.say/do.PAST
(We heard) "Doodoo doodoo doodoo" (sound of didjeridoo) we
looked.

2 Eil      [mtk]                                [mtk]
              mtk                                mtk

3 Mab      =maidi berarr+garri ngidji.
              maidi berrarrgarri ngiji
              maybe come_out      3sgmS-go/come_PRES-3sgmS
all the boys were coming out.

mha ->      +.....>

4 Mab ->    #ai: bin regin ↑poo:d [gidj] m+ab.
              ai bin regin pood gidj mab
              I past think place_name mob
I thought it was the Port Keats mob.

mha         point-NNE,,,,,,,,,,,,,,,,,,,,,>+
fig         #fig.6

```

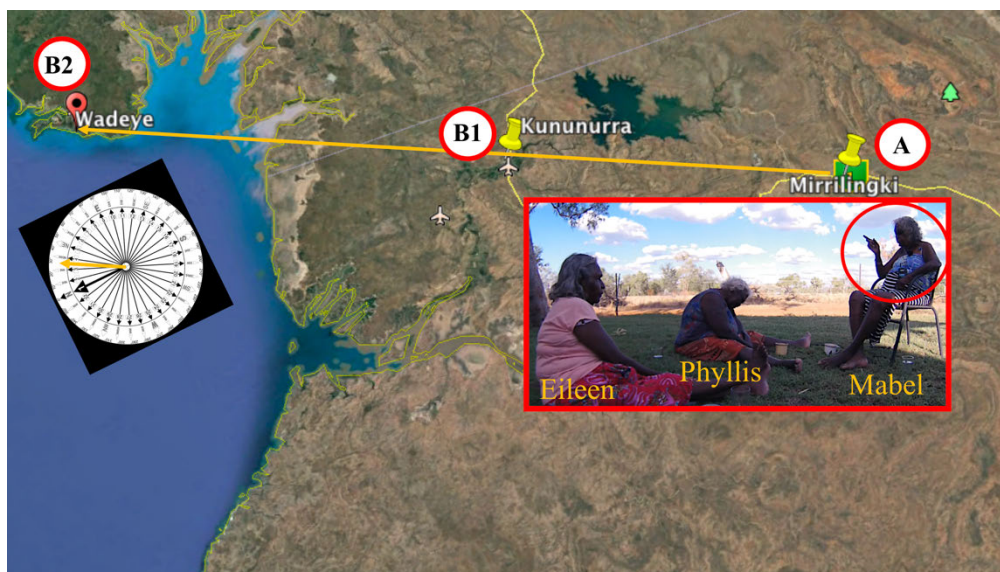


Figure 6. Mabel points north-north-east

5 Eil [mtk]
mtk

6 (0.2)

7 Eil Mm₂
Mm₂

8 (0.5)

In this exchange, Mabel is talking about a group of musicians and dancers who were performing songs at mass. She remarks that she thought the performers were the Port Keats mob and points north-north-east (lines 3-4). This point targets two possible referents: B1) Kununurra (where a number of Murrinhpatha speakers are known to reside), and B2) Wadeye (formerly known as Port Keats, where Murrinhpatha is the local language) (see Figure 6). Regardless of the intended referent, both are located north of the participants. Mabel's pointing gesture may be a form of *metonymic* pointing (i.e., pointing to a place that carries the association of the referent), and provides a means of doing person reference through place association.

Head: The majority of pointing gestures in the data set are produced by a 'head' articulator, including marked eye gaze (24), chin raises (6), head turns and nods (6), and lip points (6). These points coincide with geocentric terms, especially cardinals (e.g., *ngela yoorroong*, 'to the east'), demonstratives, some of which involve spatial relational information (e.g., *ngenengga yilag*, 'down here'), and place names on a few occasions (e.g., *Barangan*, Bedford Downs Station). Head points also coincide with implicit references to Halls Creek by means of *yilag* ('down').

This chapter situates practices for doing place reference in the context of face-to-face interaction, primarily focusing on other-initiated repair (OIR) sequences. Within this environment, problems relating to locations become publicly relevant for the interactants, who must ensure an efficient and recognitional place reference in order for their conversation to resume. First, I will present the domain of place reference in Gija conversation.

Research has shown that place references often do more than describe locations (e.g., Dingemanse et al., 2017; Enfield, 2007, Sicoli, 2016), and that referring itself involves selecting a practice from a range of alternatives (Blythe et al., 2016; Enfield, 2007; Enfield & San Roque, 2017, p. 583, Schegloff, 1972; Williams, 2016, pp. 15-17, 2017). Extract 9 illustrates how place is instantiated in the interactional context of a story-beginning. This story opens with a general description of an area on Bedford Downs Station, which sets the scene and anchors a second more specific location in which a protagonist goes hunting.

```

1          (1.0)
2  Mab      hh  [.Hhh
           hh  .Hhh
3  Phy      [Angiyi ngenengga, (0.7)Δ Δ(0.2)
           ngiyi ngenengga
           yes   here
           Yes here,
           Δ--touches Hel's arm--Δ
           pha
           phe
                                     Δ.....>
4  Phy      #laa:rniyi bara:ngen ge:ndoowayoorroonga-Δ
           laarne-iyi barange  -n   gendewa-yoorroo      -nga
           on_top-TOP place_name-LOC up      -1NS.INC.BEN-SEQ
           really high on Bedford Downs Station going upstream
           gaze-SW-----,,,,,,,,,,,,,,>Δ
           phe
           fig      #fig. 7

```

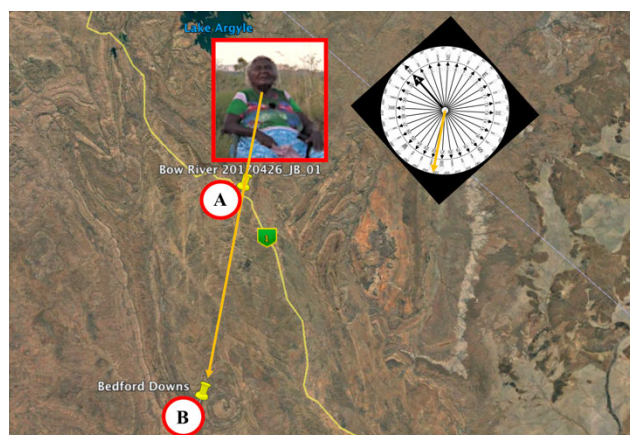
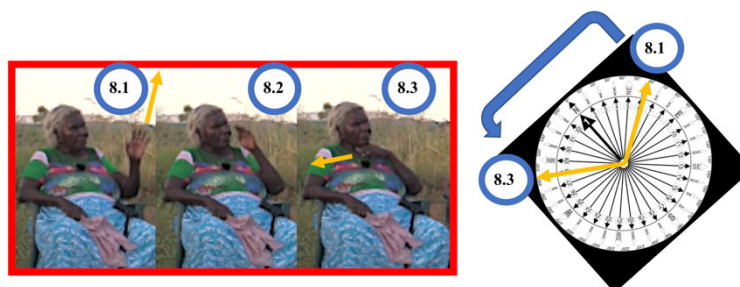



Figure 7. Phyllis lifts her head and gazes towards Bedford Downs Station

- 5 (1.6)
- 6 Phy ya:rraniyandengarri,
yarraniya-nde-ngarri
1NS.INC.S.stay_PST-CONT-SUB
where we used to stay
- 7 (0.4)
- 8 Phy AE:ROdromjen gendoowa, gh
aerodrome-jen gendewa
aerodrome-LOC up
at the airstrip up there gh
- 9 Hel ngiyi, ngi:yima.
ngiyi ngiyi-ma
yes ngiyi-INT
Yes, isn't that right.
- 10 (0.2)
- 11 Hel holiday [camp].
The holiday camp.
- 12 Phy [nginyi GOO:woomjiΔni nginiyin
nginy Goowoomji -ni ngi-niyin
PROX.M a_nickname-3SG.M 3SG.M.S-go/come_PST
This PB went
- pha Δ.....>
- 13 Phy -> #nA:w yool#angoo#goo. hh
naw yoorloongoogoo
then going_downstream
then going downstream. hh
- phasweeping point-NEbE-NWbW>
fig #fig. 8.1 #8.2 #8.3



Figures 8.1, 8.2, and 8.3. Phyllis sweeps her hand NEbE-NWbW

- 14 (.)Δ
 pha ,,,>Δ
- 15 Hel Δngoorr[oona.
 ngoorroo-n -a
 DIST -LOC-TOP
 Over there
 pha Δ.....>
- 16 Phy [joog#bany Δ
 joogbany
 hunting
 hunting
 pha pt-NWbW,,Δ
 fig #fig. 9

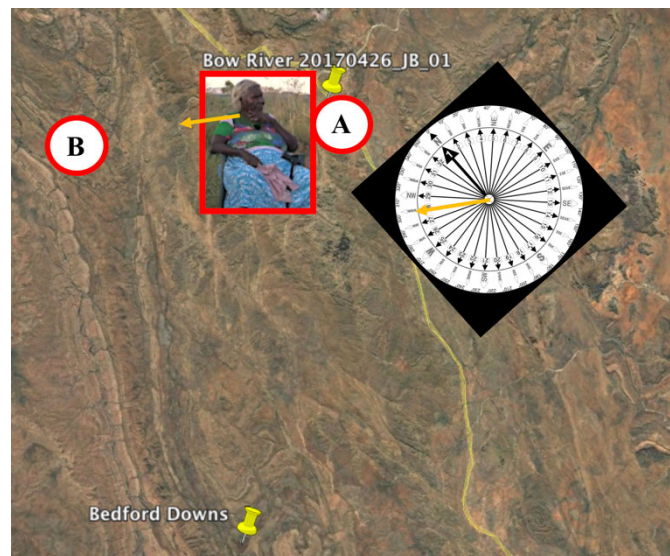


Figure 9. Phyllis points 'downstream', NWbW

- 17 (0.2)

This extract features two place references, the first of which (lines 3-11) anchors the second (lines 13-16) and sets the scene for a protagonist that is referred to using the pseudonym 'PB'. Phyllis uses a range of forms associated with linguistic and visual deixis, intrinsic FoR, absolute FoR, landmarks, as well as place names. She relies on local landmarks (Bedford Downs Station, 'the airstrip up there'), a point directed to Bedford Downs Station (see Figure 7), geocentric systems (*gendewa*, 'upstream'), and a shared experience (*yarraniyandengarri*, 'where we used to stay'), to familiarise her addressees with the place in question. She then relates her initial place reference to a second location, which is visually signified by a sweeping point from north-east by east to north-west by west (see Figures 8.1, 8.2, 8.3), a

change in verbalised directionality (from *gendewa*, 'upstream' at line 4, to *naw yoorloongoogoo*, 'then going downstream' at line 13), and a final point directed north-west by west (see Figure 9). Rather than selecting *one* term, Phyllis draws on a wide range of resources to incrementally expand the place reference, conceptualise the target location, and anchor the story setting for her addressees.

4.2 Managing Problems Related to Place Reference

When interactants produce place references during conversation, they are typically straightforward. Some place references, however, occasion problems related to speaking and recipient recognition (Kitzinger et al., 2013; Schegloff, Jefferson, & Sacks, 1977); or "producing and perceiving" (Floyd et al., 2016, p. 2). This may trigger the use of various strategies—such as other-initiated repair (OIR)—to maintain mutual understanding (e.g., Dingemanse et al., 2014, p. 8; Kitzinger, 2012, p. 229; Schegloff, 1992).

This section examines six single case analyses of OIR sequences that concern issues of place. It focuses on the formats of repair solutions and the ways that interactants combine talk and pointing behaviour. OIR has been selected as it provides a context in which place related problems become topicalised in the interaction. This environment is signified by the disruption of progressivity (via an inserted OIR sequence), thus efficiency of place reference becomes crucial for the prompt resumption of talk.

Interactants were found to launch the OIR activity (with a *where*-question), which locates a prior trouble-source related to place, and is responded to canonically by the producer of the trouble source or some other co-present interactant, who must interpret and evaluate the repair initiation. The use of content interrogatives that approximate 'where' points to place reference as the missing element (cf. San Roque, 2016), where hypothetically, "a maximally conforming response will supply precisely this unknown, sought after piece of information"

(Enfield, 2010, p. 2659). Table 4.1 presents common *where*-question words in Gija and Kriol, as it is typical of Gija speakers to use terms from both languages.

Table 4.1
Where-question words in Gija and Kriol

Where-question word	Gija	Kriol
Where?	<i>gawoo, gayi, gayiwa, garni</i>	<i>we, weye, wijeyi</i>
Where is she?	<i>gangel</i>	
Where is he?	<i>garnang, garniwa</i>	
Where are they?	<i>gawoorra</i>	
Where to?	<i>gabinga, gabiya, gabiya</i>	
Where from?	<i>gayibiny</i>	
Where (abouts)?	<i>gayanyja</i>	

The majority of OIR sequences identified in the data involved pointing gestures, which led to a focus on the role of points, amongst other practices, and provided a structure for analytic discussion. Ten OIR sequences that featured speech and pointing behaviour were identified in the sub-corpus, and were divided into two categories according to whether speech and pointing within a repair solution co-occurred or not. These sequences were examined as single case analyses of repair solutions employing points. In this chapter I will present three **synchronous** repair solutions, which feature co-occurring speech and pointing behaviour within a single move (Section 4.1.1), and two **asynchronous** repair solutions, which feature a separation of speech and pointing behaviour across two moves, where a point is produced *before* a verbalised place reference (Section 4.1.2). A final example of OIR demonstrates the single instance that did not incorporate pointing in a repair solution (Section 4.1.3). Two OIR sequences featured unsuccessful repair initiation. The lack of uptake in these

4.1.1. Synchronous repair solutions

Extract 10 demonstrates a problematic place reference in the context of a story-beginning. When the addressee fails to recognise the target location she initiates repair, temporarily suspending the progressivity of talk. In this sequence, a place name is used to relate the position of the target (a lesser known place), and embodied deixis contributes to the recognisability of the repair solution.

1 Shi GA:nggA:l nga:genyel ↓xxxxxxxl marrarn
 gangga-l ngageny-l xxxxxx -l marrarn
 granny-fem mine -fem skin-name-fem go_away
My (female relation) is going away

2 Shi nyidja [hosbidal-°yoorroong°.]
 nyidja hosbidal-yoorroong
 3sgfS-go/come_PRES-3sgfS hospital-ALL
to hospital.

3 Phy [ΔG(h)end(h)oowa h,] (0.2)Δ (0.5)
 gendoowa
 up
Upstream,
 phe Δ.....turn-NW,,,,,,,,,Δ

4 Phy .HHh [wayiniyana roord ngenaniyinde] (0.2)
 wayiniyana roord ngenaniyinde
 like_that sit 1sgS-be/stay_PAST-CONT
.HHh I was sitting there like that coming

- 5 Shi [((untranscribed))]
 ((untranscribed))
- 6 Phy (k)gerlirrangbiny ngayawarle, mm?
 gerlirrang-biny ngayawarl-e
 from_{west} -ABL sand -LOC
 from the west on the river sand, mm?
- 7 Shi .HHh
 .HHh
- 8 Hel -> gaya:nyja.
 gaya -anyji-a
 where-maybe-FOC
 Whereabouts.
- 9 Phy -> ΔGardA[roo:n #ngoorroon, (.) roo:Δgoo:n] (.) [gendoowa.]
 gardaroo -n ngoorroo-n roogoo -n gendoowa
 place_{name}-LOC DIST -LOC place_{name}-LOC upstream
 Over there at Gardaroon, upstream from Crocodile Hole
 phe Δ.....chin/gaze NW,,,,,,Δ
 fig #fig.10

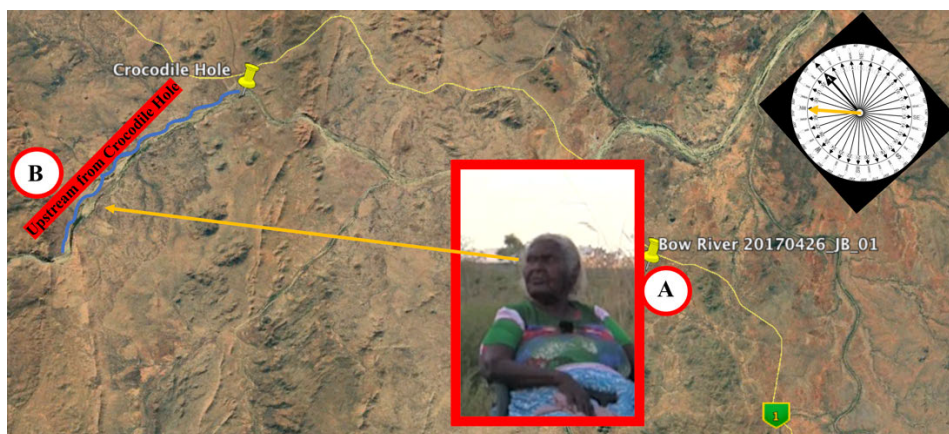


Figure 10. Phyllis gazes and points her chin upstream from Crocodile Hole

- 10 Mab [ngaga wanYA:gel dalga:.]
 ngaga wanyage-l da -l-ga
 oh_no! little -F DEM-F-FOC
 Oh this is just a small one (plane).
- 11 Hel [Aa-]
 ah
 INJ
 Ah-
- 12 (0.4)
- 13 Hel Aa-
 ah
 INJ
 Ah-

Extract 10 overlaps with the end of a discussion about a plane flying from the Warmun clinic to Kununurra, which soared over the participants' heads during the recording of this conversation (Shirley's attention towards the plane reappears at lines 1-2, and Mabel's attention towards the plane reappears at line 11). At line 3, Phyllis gazes to the north-west and produces *gendoowa* ('upstream'). At lines 4 and 6, Phyllis recasts her description of the scene for her forthcoming story, initially started at line 3, but does not accompany her speech with gaze as she had done at line 3. Despite her detailed rendering of landscape, Phyllis' method of anchoring herself in the location of the narrative by means of a landscape term (*ngayawarl*, 'sand') and external coordinates (*gerlirrangbiny*, 'from the west'), is not recognised by her addressees. This is evidenced by Helen's other-initiation of repair at line 8: *gayanyja* ('whereabouts'). Phyllis then draws on a variety of practices to repair the trouble (line 9). She produces a place name (*Gardaroon*) with additional embodied deixis (*ngoorroon* + chin point and gaze north-west, see Figure 10), and provides locational specification by geocentrally anchoring it to a more recognisable landmark with a Gija community (*Roogoon*, *gendoowa*, 'upstream from Crocodile Hole'). Despite *Gardaroon* being identifiable as a place name, Phyllis guards against the possibility that her addressees will not be familiar with this place through name alone by describing its location as somewhere upstream from *Roogoon* (see Figure 10). She also upgrades her initial head turn to the north-west that went unnoticed (line 3), by producing a more visible chin point in her repair solution.

Extract 11 illustrates a similar repair solution to Extract 10, where Shirley reformulates a problematic reference to place by incorporating a place name to improve the recognisability of her target location.

(11) Cattle Creek (20170426_JB_01_001841_001848)

1 %(0 . 6) (0.3)%
 she %>>gaze-E,,,,,,%

2 Shi tharrei gendoowa yooloo nathing na, no: goorndarri,
 tharrei gendoowa yoorloo nathing na no goorndarri
 DIST upstream downstream nothing FOC no fish
 Over there upstream and downstream there is nothing now, no fish,

3 (0.6)

4 Phy -> wijeyi-
 wijeyi
 where
 Where-

5 %(0.4)
 she %....>

6 Shi -> #ngenengga gerloorr cattle cr%eek
 ngenengga gerloowoorr cattle creek
 PROX.LOC up place_name
 Here, up at Cattle Creek
 she lip point-E-----,,,,,,,,,,,,,%
 fig #fig.11

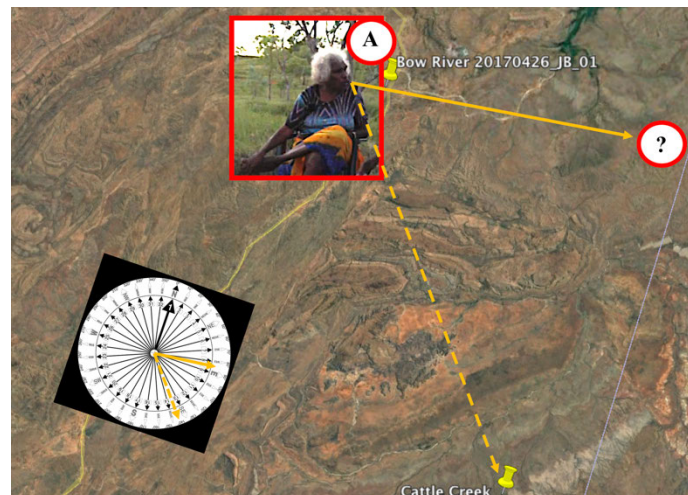


Figure 11. Shirley lip-points east

7 (0.5)

8 Hel eh,
 eh
 INJ
 yeah,

9 Phy .Hhh dama:nyji. (0.2) jirragem.
 da -m -wanyji jirrangi -m
 that-NS-maybe frog_species-NS
 .Hhh maybe those frogs

10 (0.2)

11 Shi °mm°
 °mm°

12 (0.5)

- 13 Phy ja- (0.2) jAnganyji boo:rroo:rn, hh
 jang-wanyji boorroorn
 eat -maybe 3nsS-say/do_PRES
 ea- maybe they eat hh
- 14 Shi Mm.
 Mm.

This extract begins after a previous discussion about dingos (*marrany*), or more specifically, the noted absence of dingos. At line 1, Shirley gazes to the east, which is followed by her reference to place, which comprises a Kriol distal deictic *tharrei* ('that way/over there') and two Gija geocentric terms related to a river-drainage system: *gendoowa* ('upstream') and *yoorloo* ('downstream'). Phyllis then initiates repair at line 4 through the use of the Kriol *where*-question word, *wijeyi*, as she does not appear to attend to Shirley's initial eastward gaze, which provides a visual vector to the initial place reference. At line 6, Shirley specifies the location and directs a lip-point to the east (see Figure 8), which is approximately 40° off her verbalised place name (Cattle Creek is located south-east of where the women are sitting, indicated by the broken yellow line in Figure 11). Despite this incongruous verbalised location and pointed-to location, the referential combination proves satisfactory for Shirley's addressees, and the talk resumes (lines 8-14).

Extract 12 also features the combined use of a demonstrative and point in a repair solution. However, the targeted location is a putative dreaming site, which may or may not be a real place. As a result, a place name does not emerge in the sequence.

(12) Dreaming place (20170426_JB_003754_003809)

- 1 Phy bInarriwoorroony,
 binarri-woorroo-ny
 not_knowing -M
 {He} doesn't know,
- 2 Shi Aa-
 Ah-
- 3 (0.9)

Mabel Shirley Phyllis Helen

```

mha                                     +iconic-big+
fig                                     #fig.13

```



Figure 13. iconic gesture: 'big'

- 15 Shi [(xxx xxx)]
 (xxx xxx)
- 16 Mab +ngara:yi boo:rroowanbe.+
 ngarayi boorroo-wan-be
 find 3nsS-wound_RR-3nsS
 they find them.
 mha + places hand on stomach+
- 17 (0.6)
- 18 Shi -> +gayi.
 gayi
 where
 Where.
 mha +.....>
- 19 (0.5)
 mha >
- 20 Mab -> ng#ene:ngga.+
 ngenengga
 PROX.LOC
 Here.
 mha ..point-ESE,+
 fig #fig.14

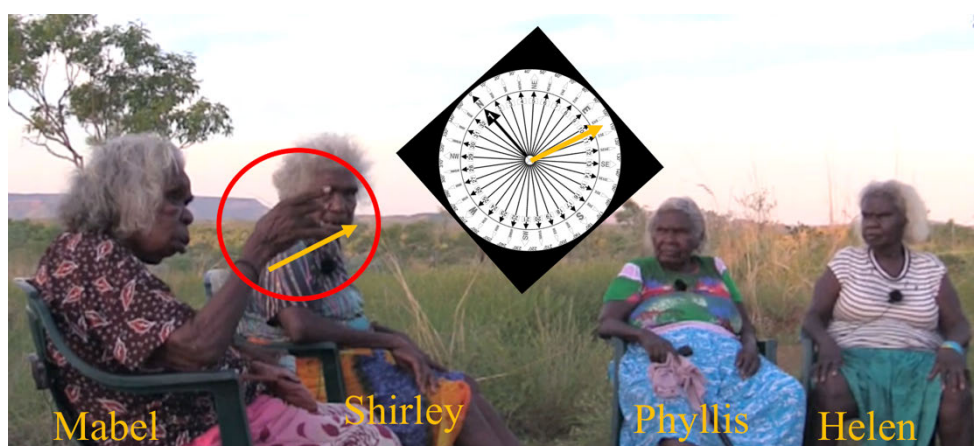


Figure 14. Mabel gazes and points east-south-east

- 21 (0.4)
- 22 Phy °mm°
 °mm°

At lines 5-6, Mabel speculates that maybe a dreaming place is *ngenenggaga yilag* ('down here'), and simultaneously points to the east with her hand (see Figure 12). At this moment, her gaze is not directed towards her target. Rather, it is directed towards Shirley, who is gazing in the direction to which she is pointing, along with Phyllis (Helen is gazing down). Helen then produces a response token (*yeah*) at line 7 in overlap with Mabel's *yilag* ('down'). At line 8, in overlap with Shirley's response token (line 9), Mabel elaborates, indicating that the dreaming place is a conception site for *wanyanyagem* ('little children'). Mabel describes what happens to women at such sites at lines 14 and 16, producing an iconic gesture that signifies getting 'big' (see Figure 13). At line 18, Shirley initiates repair through the use of a *where*-question word (*gayi*). This repair initiation targets Mabel's prior expression: *ngarayi boorroowanbe* ('they find them'), which doesn't specify *where* 'they' are found. Mabel prepares her responsive pointing gesture in overlap with Shirley's repair initiation, and at line 20, she gazes and points with her index-finger to the east-south-east and repeats the proximal *ngenenggaga* ('here') (see Figure 14). In this final move, she provides the same vocalised information as her initial place reference, but alters the articulation of her point (from a hand point, to an index-finger point), and this time aligns her gaze.

In this sequence, repair is other-initiated on a place reference that initially features a hand point and *disaligned* gaze. In the repair solution, gaze and pointing behaviour are aligned. This alignment also appeared in Extracts 9 and 10, where both reparative points were produced with the head, which assumes directionally aligned eye gaze. In this extract, it is Mabel's index-finger point and aligned gaze direction that resolves the issue of *where* she is suggesting there may be a dreaming site. In the absence of a specific place name, Phyllis' weak acknowledgement token (line 22) suggests that a conception site in that general area is at least plausible.

4.1.2. Asynchronous repair solutions

This section focuses on asynchronous repair solutions in two sequences, which are characterised by a separation of pointing behaviour and speech across two distinct moves. In these sequences, repair solutions have two parts, the first of which involves a point, and the second involves a verbalised place reference.

Extract 13 occurs after a discussion about the weather and a bumpy car ride earlier that afternoon. In this extract, an asynchronous repair solution resolves a prior lack of locational specification.

(13) Jealous (20170426_JB_01_001115_001128)

- 1 Shi j DANY NGE:L↑aa↑
j da -ny ngela
skin_name DEM-M east
That J east?
- 2 (0.2)
- 3 Shi ma:rroo-ma:rroo woomenjende, i bin
marroo-marroo woo-men-je-nde i bin
be_jealous 3sgS_MID-say/do_PRES-3sgmS-CONT he past
He became jealous, he
- 4 thAlooj, hi bin goo loorroo:b la- °#mm#°
thalooj hi bin goo loorroob la
hit_on_head he past go chase to
hit {someone} on the head, he went and chased {him} to... mm
- 5 (0.6)
- 6 Hel °hha.°
hha.
- 7 (1.2)
- 8 Shi goorlangge R loorroob la im tharr[oo-tha:rroo] la im.=
goorlangge R loorroob la im tharroo la im
poor_thing a_name chase to him pour_water on him
Poor thing R, he chased {him}... poured water on him.
- 9 Phy [mm:
mm:]
- 10 Hel -> =↑aa↑ (.) gayiya:nyja.
ah gayi -anyji-a
INJ where-maybe-FOC
Ah, whereabouts.
- 11 %# (0.8) %
she -> %lip-SE%
fig #fig.15

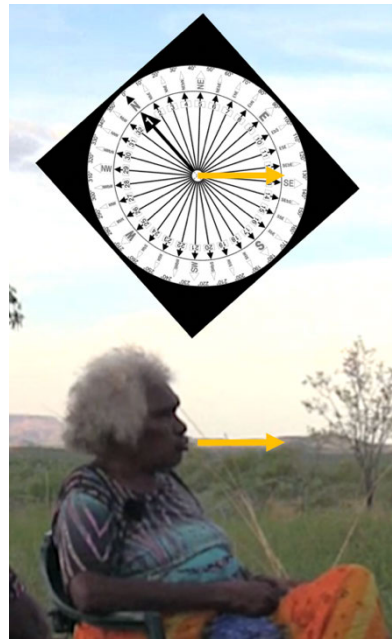


Figure 15. Shirley lip-points south-east

- 12 Shi -> tharrei ngela.
 tharrei ngela
 DIST east
 Over there, east.
- 13 Hel Ah.
 Ah.
- 14 (1.1)
- 15 Mab berrembiboorroo daam
 berre -m -bi -boorroo daa -m
 PROX.DEM-NS-TOP-for them country-NS
 country for this mob
- 16 Shi ngiyi, boorroonboorroo daambi.
 ngiyi boorroon -boorroo daa -m -bi
 INJ 3NS.S.SAY.PRES-3NS.BENE country-NS-TOP
 Yes, they talk for their country.
- 17 (0.7)

At line 1, Shirley continues to talk about a man who got into a fight (referred to using the pseudonym 'J'). Helen other-initiates repair at line 10 (*gayiyanyja*, 'whereabouts'), which signals the lack of locational description in lines 4 and 8 (Shirley produces Kriol preposition *la*, but she does not specify a place). Shirley then provides the first part of her asynchronous repair solution via a lip point directed towards the south-east (see Figure 15). The second part of her repair solution promptly follows, and is composed of a Kriol distal deictic term

Shirley's two-part repair solution features first a pointing gesture, and then a verbalised place reference. The asynchronicity of these elements may be a practical choice due to the difficulty of simultaneously lip-pointing and producing *tharrei*, although the verbalised place reference might also contribute a reformulation or an upgrade of the initial reparative point, which may otherwise remain somewhat locationally vague in isolation.

(14) Crocodile Hole-2 (20170426 JB 01 000453 000511)

1 Hel eh-e[h
e-e
INJ
That's right

2 Phy [↑deyenanoo:wa tha:mbA:rlamgami:yi
diyena-nhoowa thambarla-m -ga -miyi
DEM -from_him footprint-NS-FOC-also
His footprints were there from where he had been

3 barndewarndegngim, (0.3) [NGAY]awarle.
barndeg -warndeg-nge -m ngayawarl-e
lie_in_sun-RDP -that_kind-NS sand -LOC
lying out in the sun, on the river sand (the crocodile).

4 Mab [mm.]
mm.

5 Hel ngi:yi
ngiyi
yes
Yes

6 (0.2)

- 7 Shi -> danya: na na:warrany when they bin fAI:ndem im top
da -ny-a na nawarra-ny when they bin faind-em im top
DEM-M -TOP FOC big -M when they past find -TR him top
That's the big one they saw on the top
- 8 -> [la monday=
la monday
on monday
on Monday
- 9 Phy [m:m.
m:m.
- 10 Shi =we bin >getembat *wanyanya[gem.<]
we bin get-em-bat wanyanyage -m
we past get-TR-IMPV little_ones-NS
when we were getting the little ones
hha *.....>
- 11 Hel [#n g i : n y]jinyi.
nginyji -ny-i
PROX.DEM.M-M -TOP
This one (masculine)
hha point-E(1),,,.....>
mhe>
fig #fig.16



Figure 16. Helen points east

- 12 Mab -> ga:yanyja,*
gaya -anyji-a
where-maybe-TOP
Whereabouts,
hha (2),,,,,,,>*<
mhe ..gaze-P&H->
- 13 (0.2)*(0.2)+(0.2)#(0.2)+(0.2)*
hha -> *.....point-NNW,,,*<
mhe ----,,,,,,+ +.....>
fig #fig.17



Figure 17. Helen points north-north-west to Crocodile Hole

14 Hel -> crocodile ↓hole. h
 crocodile hole
 place_name
Crocodile Hole. h
 mhe gaze-P&H----->

15 Mab -> +ngenengga yI:lag.
 ngenengga yilag
 PROX.LOC down
Down here.
 mhe +.....turn-ENE->

16 (0.2)+
 mhe ,,,,+

17 Phy -> Δ#yeah, yoolooyoo#rroong.Δ
 yeah yoorloo -yoorroong
 yes downstream-ALL
Yeah, going downstream.
 pha Δ#....-point-N---#,,,,,,Δ
 mhe gaze-P&H----->
 fig #----fig.18-----#

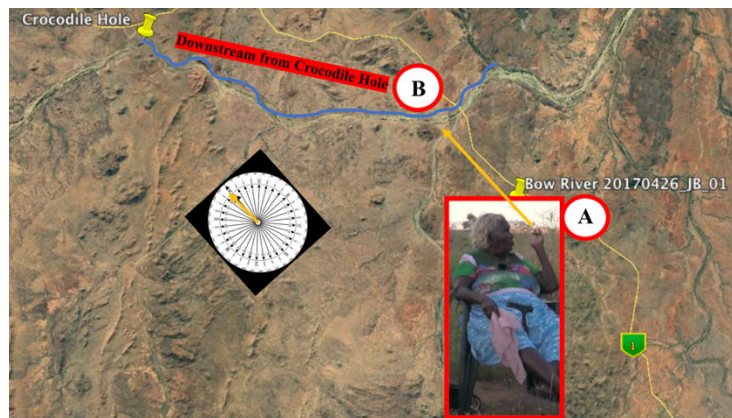


Figure 18. Phyllis points north, downstream from Crocodile Hole

18 (0.2)
 mhe ----->

19 Mab [mm.]
mm
 mhe ----->

20 Hel -> *[Ah here] la that.
 ah here la that
 INJ PROX.LOC LOC DIST.DEM
Ah here, at that.
 hha *.----->
 mhe ----->

21 #(.) (0.5) *
 hha point-N,,,,,*
 mhe ----->>
 fig #fig.19



Figure 19. Helen points north

At lines 2-3, Phyllis continues her narrative about a lack of fish due to the presence of a crocodile at a river. After Mabel and Helen's minimal response tokens (lines 4 and 5), Shirley recounts *another* event about the same crocodile, which occurred on a different occasion (*la Monday*, 'on Monday') (lines 7-8 and 10). At line 11, Helen covertly refers to the crocodile through the use of the masculine demonstrative pronoun and masculine suffix, *nginyjinyi*, 'this one' (masculine) (see pp. 23-24), which agrees in gender with the crocodile. This reference co-occurs with the first beat of an axial index finger point, directed to the east (see Figure 16). The combination of verbal and embodied deixis suggests that she knows *which one* Phyllis and Shirley are talking about (i.e., 'this one', in the east). After looking down for an extended length of time, Mabel lifts her head and initiates repair at line 12 (*gayanyja*, 'whereabouts'), *after* Helen's two points to the candidate location of the crocodile (i.e., Mabel does not see them). Helen's eastward pointing gestures at lines 11-12 appear to pre-empt Mabel's initiation of repair, after which she produces the first part of an asynchronous repair solution: a point north-north-west, towards Crocodile Hole (*Roogoon*) (see Figure 17). But Mabel does not see this point either, as she is looking down at a piece of cloth. At line 14, Helen produces the second, verbalised part of her repair solution by means of a place name, articulated in English:

'Crocodile Hole'. At line 15, Mabel lifts her head and produces a candidate place reference (*ngenengga yilag*, 'down here'), which features a coincident gaze east-north-east. Phyllis then confirms Mabel's prior candidate at line 17 (*yeah*), and elaborates through the use of a riverine term with an allative suffix (*yoorlooyoorroong*, 'going downstream') and a co-occurring point to the north (see Figure 18), which locates the crocodile as somewhere downstream from Roogoon. Mabel then utters a minimal response token (*mm*) at line 19, which overlaps with Helen's verbal and visual confirmation at lines 20-21 (*ah here la that* + point to the north) (see Figure 19).

In this extract, OIR temporarily halts the progressivity of a 'nested' story about a crocodile due to Mabel's inattention and confusion about whether the event of the 'nested' story happened at a previously mentioned location or not. Issues related to the location of the crocodile in the setting of the story are managed entirely by the three addressees (Helen, Mabel, and Phyllis), who work collaboratively to repair and expand an initial place reference to secure mutual understanding and allow for the conversation to resume. Helen's selection of an asynchronous repair solution is driven by Mabel's inattention to the initial reparative point (she is looking down at a piece of cloth). Thus, the second part of Helen's solution ensures recognition through the use of a verbalised place name, which is then expanded and confirmed in a second insertion sequence. In this sense, perhaps the verbalised part of Helen's place reference is in fact an upgrade or reformulation of the initial reparative point, which went unnoticed by the person that it was designed for.

4.1.3. Place reference repair without pointing

Although pointing was prevalent (either synchronously or asynchronously) in the majority of repair sequences, the following extract demonstrates the sole instance of a repair solution that occurred *without* a point. Extract 15 illustrates a place name (Darwin) as an effective solution for subsequent reference to place (cf. Williams, 2017, p. 571).

(15) He went up over there on the side (20170426 JB 01 003332 003408)

1 Hel =sa:nwan bin go dan ↑de↑
 san-wan bin go dan de
 son-ADJ past go down LOC_dist
{My} son went down there.

2 (0.2)

3 Shi yangi:rni E.
 yangirni E
 who_masc a_name
Who, E?

4 (0.2)

5 Hel Mm::.. (.) >lilboi.<
 mm little boy
 INJ little_boy
Mm::.. little boy.

6 (0.6)

7 Shi hi bin ↑kambek brom >that< yi:la:ng
 hi bin kambek brom that yilang
 he past return from DEM_dist from_down
He came back from down {there}?

8 (0.2)

9 Hel Mm: ↑im la, (0.4) [(0.2)] (0.4) i la da:d tharre:i °na°=
 mm im la i la dad tharrei na
 INJ him at he at dad DIST FOCc
Mm, he's at... he's at {his} dad's place there now

10 Mab [(xxx)]
(xxx)

11 Mab -> =garniwa.
 garniwa
 where
Where.

12 (1.4)

13 Shi -> d[aa:wen.
 darwin
 place_name
Darwin.

14 Phy [ugh- ugh-
ugh- ugh-

At line 1, Helen refers to a family member (*sanwan*). Shirley then other-initiates repair on this underspecified person reference at line 3 (*yangirni*, 'who (masc)') and proffers a candidate name (referred to anonymously here as 'E'). Helen confirms Shirley's candidate at line 5 (*Mm::*) and offers an alternative reference by means of the Kriol diminutive *lilboi* ('little boy'). Shirley requests information about this person's whereabouts at line 7 through the use of a deictic: *yilang* ('from down there'). This candidate place reference is then confirmed and expanded by Helen (line 9), who upgrades it by referring to a more recognisable place associated with another relation (*la dad tharrei*, 'at dad's place'). However, Mabel orients to the lack of specificity in these place references and other-initiates repair at line 11 (*garniwa*, 'where'). In response, Shirley once again strengthens the recognisability of the reference and produces a stand-alone place name (Darwin) at line 13.

In this sequence, a vague deictic (*brom that yilang*, 'from down there'), becomes more recognisable through reference to a relation's place (*dad tharrei*, '{his} dad's place'), and reaches maximal recognisability through the use of a straightforward place name (Darwin). This minimal repair solution contrasts with the elaborate, expanded place references observed in other extracts, which often targeted places that were more complicated for interactants to recognisably convey. For instance, in Extract 10 (Crocodile Hole-1), Phyllis combines a variety of practices to make sure the targeted location is recognisable for the addressees, and provides locational specification by geocentrally relating the target location to a more recognisable place which has a Gija community (*Roogoon, gendoowa*, 'upstream from Crocodile Hole'). Despite *Gardaroon* being identifiable as a place name, Phyllis guards against the possibility that her addressees will not be familiar with this place through name alone. Place names are only effective as recognitionals when the speaker can be certain that the addressee is familiar with that place name. By contrast, 'Darwin' (a major city) does not require this kind of elaboration.

Chapter 5 Discussion and Conclusions

5.1 Summary of Findings

This study has examined diverse practices related to place reference in Gija conversation, and has analysed how they are used when issues of place are made public for interactants during occasions of OIR. Findings contribute to theoretical debates about the relationships between speech and gesture, CA research on the infrastructure of interaction in the visuospatial modality, and research on FoRs and the language of space. Investigating place reference and pointing in Gija conversation offers a novel perspective of this particular language to a growing body of research examining spatial FoRs in Australian Aboriginal languages in greater detail than previously attempted (see Hoffmann, 2019; Palmer et al., 2019). This research also provides a basis for future investigation of linguistic and embodied practices in Gija, and comparative analyses across different communities. The use of geospatial technology has provided a tool for investigating how interactants engage with the wider spatial setting, and presents an innovative approach to situated action-in-interaction that has the potential to be applied to other contexts. The combination of various methods adopted in this study has led to new insights into understandings of Gija demonstratives (p. 44), deictic motion suffixes and enclitics (p. 45), and overlapping absolute systems (pp. 41-43) used by speakers of this language.

5.2 Practices for 'Doing' Place Reference in Gija

The illustrative extracts in Chapter 3 demonstrate how interactants combine a diverse range of forms (see Levinson, 2003; Levinson & Wilkins, 2006) with points to construct effective references to place. The flexibility of place reference formulations is evident through alternative methods of referring to a nameable place without explicitly naming it (e.g.,

'Halls Creek' in Extract 2). The overwhelming preference for combining multiple practices for 'doing' place reference suggests that interactants actively pursue *recognition* (Levinson, 2007, p. 35), despite compromising *minimisation* (Levinson, 2007; Sacks & Schegloff, 1979; see Williams, 2017, p. 574, for a similar practice in Kula). The frequent coincidence of pointing gestures with demonstratives in particular (but also cardinals and spatial relational terms) can be seen to enhance the recognisability of such utterances, thus contributing directional information that might otherwise be underspecified. The role of pointing in these constructions relates to notions of language as inescapably composite in nature (Enfield, 2009), as pointing often carries directional information that is just as important, if not more so, than talk.

Another dimension of place reference concerns language choice. Of the eighty demonstratives that were produced as a means of place reference, eleven were expressed in Kriol, three were expressed in English, and the rest were produced in Gija. Kriol and English were not used for terms related to absolute or intrinsic FoRs. Rather, these terms were produced exclusively in Gija. This suggests that speakers may be more flexible in their choice of language when producing demonstratives, yet restrict their language use in the domain of spatial FoRs, which are more closely linked to the environment and rely on fixed bearings (absolute FoR) or the asymmetrical geometry of a ground object (intrinsic FoR). Testing this claim on a larger data sample would shed more light on this issue and offer insights into what drives the linguistic choices that Gija speakers make during occasions of spatial description.

5.3 Linguistic Developments

OIR has not only provided a distinctive analytic environment for investigating place reference, it has highlighted the efficiency of forms chosen to repair and expand problematic references to place. Analysing place references and how they function in the context of place-

related OIR has led to new insights about the Gija language, offering improved understandings of demonstratives and deictic motion suffixes and enclitics. These developments contribute to existing research on the semantics of demonstrative use (Enfield, 2003), new grammatical descriptions of under-explored linguistic categories (Williams, 2016, 2017) and investigations of "language as cultural practice" (Sicoli, 2016, p. 189), all of which have emerged from interactional analyses. Confirming the distributions of terms used for spatial reference in Gija and comparing them with other languages would be a valuable method for taking these findings forward (de Dear et al., 2019).

In light of the analyses discussed in Chapter 4, ongoing transcription, and a single trial of the 'Hidden colour-chips' task (Enfield & Bohnemeyer, 2001) conducted in July 2019 (see Appendix A), our understandings of demonstratives are developing (Blythe & Kofod, personal communication, September, 2019). A two-way distinction is more likely than a three-way contrast (Kofod, 1996a), which is supported by cross-linguistic research (Levinson et al., 2018). This system comprises two categories; proximal and distal, and a third category that is (relatively) unmarked for distance (see Levinson, 2018, p. 24). Results from the 'Hidden colour-chips' trial (see Appendix A) suggest that the erstwhile 'medial' terms may instead be principally used for recognitional deixis (interactants consistently used this category of demonstratives to formulate expressions such as *Wentha **dany** werrgalji garniwa*, 'Right, and **that** green one, where is it?'). The flexible use of demonstratives observed in the data makes accurate description difficult (see Levinson, 2018, p. 21), thus more empirical work is necessary.

Focusing on conversational data and language use in contexts of spatial reference has also contributed new insights into how motion between locations is morphologically marked by two productive suffixes *-yoorroong* ('allative') and *-biny* ('ablative'), and by two enclitics *=mili* ('hither') and *=gili* ('thither') (see p. 45). The enclitics foreground the 'here-space' of

the interaction (Enfield, 2003, p. 89), whereas the allative and ablative suffixes foreground the 'there-space' (i.e., 'not here', see Cutfield, 2018, p. 91), which is indicated by the base onto which the suffixes are attached. The use of *-yoorroong* and *=gili* are quasi-synonymous, in that directional descriptions that these terms implicate are usually the same. This is also true for *-biny* and *=mili*. For instance, a person in Warmun speaking about others travelling from Kununurra could equally describe them as moving '{from} Kununurra *to here*', as '*from* Kununurra {to here}'. The direction would be the same.

These developments have emerged from the various methodological approaches employed in this thesis. Continuing to experiment with approaches to descriptive linguistics, and accounting for the influence of interactional dynamics on the selection of referential forms has the potential to uncover more detailed understandings of lesser-explored word classes in Gija (and other languages), and the factors that drive interactants to choose particular forms for specific interactional purposes.

5.4 Place Reference in Repair Solutions

Chapter 4 presented place-related OIR sequences that emerged during problems related to recipient recognition, or in "modality-neutral terms, 'producing and perceiving'" (Floyd et al., 2016, p. 2). OIR provided a distinctive analytic environment where issues of place were topicalised for the interactants, and efficiency of place reference became central for the swift resumption of talk. This context highlighted the efficiency of practices chosen to repair and expand problematic references to place.

Adopting a focus on pointing gestures has highlighted the importance of points as a means of expressing angular specifications (Danziger, 2010). Evidence for this notion surfaced in the data, as when a point was overlooked during occasions of place reference (or was simply not produced in the case of Extract 13), problems in the interaction emerged (see

Chapter 4). This reflects the communicative import that interactants place on points when referring to places. Often it is the point that carries vector information (see, for instance, Extracts 10 and 11).

The most efficient repair solutions featured *synchronous* speech and pointing behaviour composed as a single move. *Synchronous* repair solutions indicated that the interactants understood the problems to have emerged because of an overlooked point in an initial place reference. Each of the synchronous repair solutions responded to a place reference that was not attended to by the addressee/s, and was (minimally) composed of a demonstrative and coincident point. Each of the reparative points functioned as a 'visual upgrade' of an initially overlooked point, which contributed to the recognisability of the associated place reference and demonstrated that pointing is central to *recognition*: In Extract 10, Phyllis upgrades her initial head turn to a chin point, in Extract 11, Shirley upgrades her initial gaze to a lip point, and in Extract 12, Mabel upgrades her initial hand point to disaligned gaze, to an index-finger point with aligned gaze. The importance of pointing in these extracts supports Kendon's (2017) proposal that "gesturing is a part of languaging" (p. 168), at least in the context of place reference and spatial description.

The two *asynchronous* extracts illustrate a two-part repair solution that feature an initial pointing gesture followed by a verbalised place reference, across two distinct moves. The division of speech and gesture in this context was both a practical choice (due to the possible difficulty of simultaneously producing *tharrei* and lip-pointing in Extract 13), and a safe-guard against disengagement or inattention during the first part of the repair solution (Extract 14). In these extracts, the incompleteness of a stand-alone lip point (Extract 13) and overlooked initial point (Extract 14) suggest that a subsequent place reference may function as a cross-modal upgrade or reformulation of the initial point.

Ongoing research emphasises conversational repair as a means of maintaining mutual understanding between interactants (e.g., Dingemanse et al., 2014, p. 8; Kitzinger, 2012, p. 229; Schegloff, 1992), and providing adequate references to place in particular sequential positions, such as story-beginnings, which is central for setting the stage and providing story coherence (Dingemanse et al., 2017). The sequences investigated in Chapter 4 demonstrate that participants actively pursue *recognition* when references to place are concerned, and will suspend the conversation to secure it.

5.5 Implications for CA and Studying Spatial Reference

The paucity of data on gesture (and sign) use in in everyday conversations - particularly those conducted in Australian Aboriginal languages - reveals a significant gap in current research on human communication. This thesis provides an in-depth analysis of the systematic use of speech and pointing gestures in Gija conversation, and contributes to a growing body of work concerned with how aspects of interaction systematically function in the visuospatial modality (e.g., Blythe et al., 2018; Floyd et al., 2016; Lerner, 2003; Mondada, 2013; Rossano, 2012). In Gija, pointing plays a central role in repair organisation when issues of place are concerned, and continued research in this area has implications for understandings of the cross-modal organisation of conversational structures.

Synthesising a range of methods has also contributed new insights about the language of space in Gija. At times, locating the boundaries between practices related to overlapping geocentric systems and across absolute and intrinsic FoRs was difficult (especially due to new evidence that terms used to denote river-drainage and hillslope appear to intersect). For instance, the term *yilag* ('down/downhill/bottom') can be used to describe the position of entities in relation to a projected angle expressed using geocentric orientation (absolute FoR), or the *bottom* facet of a ground object (intrinsic FoR) (see pp. 41-42).

Most research on FoRs in Australian languages focuses on 'absolute dominant' spatial systems (see, for instance, Levinson, 2003; Majid et al., 2004). However, the idea of a predominant FoR somewhat conflicts with the ways that Gija speakers routinely combine terms from both absolute and intrinsic FoRs (as well as other linguistic categories) to shape and categorise the space around them. Rather than locating a 'dominant' FoR in Gija, findings align with research on the diversity of (overlapping) Australian absolute systems (see Hoffmann, 2019; Palmer et al., 2019).

5.6 Limitations and Future Research

Indigenous knowledges of place are deeply connected to the Australian landscape, and the history and identities of its people (e.g., Kofod, 2003; Merlan, 1981; Rumsey, 1993). This research presents an additional perspective to an already rich network of geographical and locational knowledge, with regard to how Gija people map meaning onto the natural environment and refer to places through talk and embodied action. The use of Western research traditions generates methodological limitations and is not intended to overshadow Indigenous intellectual approaches.

Further analysis of *synchronous* and *asynchronous* place references would expand the set of single case analyses examined in this thesis. Additional research on the factors that drive the selection of *asynchronous* formulations may clarify whether speakers choose to disconnect their speech and pointing behaviour in the context of repair solutions for reasons other than practical concerns (e.g., due to the constraints of turn-taking organisation). Systematic investigation of eye gaze direction in relation to points may also shed more light on whether aligned gaze and pointing behaviour is critical to securing reciprocity (e.g., Goodwin, 1979) (see Extract 12).

Another area that would benefit from further research involves the application of FoR theory and interactional dynamics to linguistic description. During the course of analysis, new linguistic insights emerged. Future research of situated, informal interaction has the potential to improve our understandings of more Gija terms, and account for the influence of interactional dynamics on the choices that speakers make during occasions of reference from a 'speaker-centred' perspective (see, for instance, Enfield, 2003). Future research should be geared towards enhancing the level of transcription, which would potentially facilitate elaboration of these findings across a larger data set and in collection-based analyses.

5.7 Implications for other research domains

Continued investigation of the language of space in Gija may have significant consequences for other domains, such as time (Boroditsky & Gaby, 2010; Gaby, 2012), and may reveal how speakers map abstract domains (such as time) onto the space around them (Le Guen, 2011a, p. 300). For instance, Floyd (2016) notes that absolute coders of Nheengatú make time-of-day references by pointing to targets along the east-west axis of the sun's diurnal trajectory across the sky. Reports from Yucatec Maya suggest that speakers represent 'now' or 'specific' time by pointing at their feet, and collapse the notion of future and past into a single category of 'distant time', which is illustrated by gesturing towards the space above the head (Le Guen, 2011a, p. 301).

Investigating FoRs and practices related to spatial description also presents significant implications for education and Aboriginal children's language acquisition. For instance, Edmonds-Wathen (2014) demonstrates the influence of heritage language on spatial FoRs in Aboriginal English(es), which has significant implications for comprehending spatial terms used in mathematics. Today, younger generations of Gija people speak Kimberley Kriol with some Gija vocabulary, including kinship terms, skin names, and swear words (Blythe,

personal communication, 2019). It is not yet known how they describe spatial relationships with speech and gesture. Future research has the potential to take this matter further, which would contribute to the resilience of the language and assist younger generations of students.

5.8 Conclusions

This thesis has investigated linguistic and embodied practices for the formulation of place reference in Gija conversation. Analyses have shown an interdependence of speech and visible bodily behaviour in the domain of place reference, and have led to new linguistic insights of terms used for spatial description. This is one of the few in-depth studies of gesture and its relationship to talk conducted in an Australian language, which is based on informal conversational data. The use of geospatial technology has enabled close examination of situated interaction within the wider spatial setting, and indicates that the scope of CA continues to grow and adapt.

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Appendix A

'Hidden colour-chips' task

During the July 2019 field trip, Blythe and I conducted the 'Hidden colour-chips' task (Enfield & Bohnemeyer, 2001). Results suggest a slightly different interpretation of demonstrative distinctions. At one point, a participant produced an index finger point, raised at a 45° angle, which moved between two locations. One location was approximately 10 m away from the speakers, and the other even further away (out of visible range). The form of the point was consistent, and distal *ngoorroon* ('over there') was used to refer to both targets (i.e., 'medial' space *and* 'distal' space). Although this caveat is based on a single trial, visibility and distance may not influence demonstrative selection (or point articulation). A two-way distinction is more likely than a three-way contrast (see Levinson et al., 2018). During the task, 'medial terms' previously thought to mean 'that there' were consistently used for recognitional deixis (e.g. Wentha **dany** werrgalji garniwa, 'Right, and that green one, where is it?').

Appendix B

Transcription conventions

Table B1

Transcription of speech

[hello]	Brackets indicate overlap.
=	Equal signs indicate latching (no interval).
(.)	A micropause (less than two tenths of a second).
(0.5) (1.2)	Elapsed time (in tenths of a second).
.hh hh	Signifies audible aspiration (breath, laughter).
?	A question mark signifies rising intonation.
¿	An inverted question mark signifies a pitch rise that is stronger than a comma, but weaker than a question mark (a dip and a rise).
,	A comma signifies continuing intonation.
.	A period signifies falling intonation.
<u>:</u> <u>_</u> :	An underlined colon signifies rising pitch, and an underlined letter preceding a colon signifies falling pitch.
↑↓	Arrows mark a sharp rise or fall in pitch.
<hello>	Outwards pointing 'more than' and 'less than' symbols signify talk that is drawn out/slow.
>hello<	Inwards pointing 'more than' and 'less than' symbols signify talk that is compressed/rushed.
>hello	One 'more than' symbol indicates a jump start.
<u>word</u>	An underlined letter indicates emphasis (pitch does not change).
<u>word</u>	Two underlined letters indicate emphasis (pitch drops).
CAPITALS	Upper case script marks loud talk.
↑↓	Arrows indicate sharp rises and falls in pitch.
wo:w wo::w	Colon/s signify elongation of the preceding sound.
°no kidding°	Degrees signs indicate quiet talk.
#hello#	Hash symbols indicate creaky voice.
\$hello\$	Dollar signs indicate smiley voice.
(hello)	Words in parentheses signify a transcriptionist's possible hearing and registers uncertainty.
(xxx)	Three 'x's within brackets signify a syllable when talk is unintelligible. Multiple syllables can be signified by multiple groups of three 'x's.
((knock))	Notes in double parentheses are a transcriptionist's description of audio materials other than verbalisation.
->	An arrow at the beginning of a line indicates phenomena of interest.

Note. Transcription of speech is based on Jeffersonian conventions (Hepburn & Bolden, 2017; Jefferson, 2004).

Table B2

Transcription of visible bodily behaviour

xha	A participant ID (x) for visible behaviour
xhe	comprises the first letter of the participant's name in lower case, followed by 'ha' for manual gestures, or 'he' for those conveyed with the head. When two hands point simultaneously, 'R' and 'L' can be added to the participant ID to differentiate between hands.
+ +	Pointing gestures and embodied action are
* *	delimited between two identical symbols (one per participant), and are synchronised with
Δ Δ	corresponding stretches of talk.
>>	The action described begins before the extract's beginning.
--->>	The action described continues after the extract's end.
+--->	The action described continues across subsequent lines,
--->+	until the same symbol is reached.
....	Horizontal dots signify the preparation phase of a pointing gesture.
e.g. index-finger point	A description of a point signifies its stroke.
, , , ,	Commas signify the retraction of a pointing gesture.
(1)/(2)	Bracketed numbers indicate the beats of pointing gestures. Width between brackets can be altered to convey duration and align with talk.

Note. Conventions for transcribing visible bodily behaviour are adapted from Mondada (2016).

Appendix C

Ethical approval and participant consent forms

Office of the Deputy Vice-Chancellor (Research)

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Dear Dr Blythe

RE: 5201919197930 - Endangered conversations in East Kimberley languages

Your amendment request has been approved.

You may access the application by logging into the [Human Research Ethics Management System](#).

Kind regards,

Ethics Secretariat

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Information about Conversation in East Kimberley languages

Title: Endangered conversations in East Kimberley languages

Researchers: Dr Joe Blythe, Josua Dahmen, Caroline de Dear Department of Linguistics, Macquarie University.

This project has been approved by the Human Research Ethics Committee of the Macquarie University.

Plain Language Statement

The statement will be administered in English, Kriol, Jaru, Gija or another East Kimberley language, as required. Where appropriate the statement will be given orally, rather than in written form. In which case, the consent process will be conducted orally and recorded.

Purpose of the Project

The purpose of the project is to look at everyday conversation in the language(s). Many Aboriginal languages don't have enough people to speak them every day. Some languages are finished. Some languages are sleeping. I think that if we look at how you people speak language to each other everyday, then we can learn more about how you use the language to do what you need to do. When people like me understand how people use words to do things, might be we can help Aboriginal people keep their languages strong. If we get good information, maybe later on we can help to wake up those languages from sleep.

So I would like to record you and your friends and family talking together on video about whatever you want to talk about. We might go bush and have a feed, or a cup of tea. You mob can have a talk about anything you want to talk about. I will set up the camera and walk away (not too far). I want to record the kind of language you mob use in the bush, when there are no whitefellas hanging around listening. I won't listen while the video camera is recording. Later on, maybe the next day, I will listen and write down the words. Maybe you can help me understand the words.

I'm interested in how people understand each other when they speak in language. How do you mob know who you are talking about? How do you know where people are talking about. When do people use place names? When do they describe a place? When do people point? When do they talk with their fingers?

I'm also interested in questions. When do people ask questions? When do people ask for things? When do they ask for information? What do people do if they don't want to answer a question, or provide whatever was being requested?

You can ask me questions about the work I am doing and you don't have to work with me if you don't want to. You don't have to do anything or talk about anything you don't want to. And any time you want to pull out that's OK. Also, if you are a bit worried about something that was said in a recording, and you think it might cause some trouble, you can tell me and I can cut it out. I won't use any language that will make trouble, or is secret. Try and tell me quickly so I can cut it out. The longer I



have it, the harder it is for me to cut it out.

You will get paid when we make a recording of conversation, maybe \$50 or \$100 if it's a longer recording. You will also get paid if you help me to understand the language later on. Or, I might ask some other people for help in understanding what is being said, when I don't understand the language. I will record these sessions too, probably just with audio.

If you say it's okay, I will make copies of the recordings to be kept at the Kimberley Language Resource Centre and the Australian Institute for Aboriginal and Torres Strait Islander Studies (AIATSIS) in Canberra, so that people will always be able to hear how you and your family speak your language. In the future, if your descendants want to get a copy, the AIATSIS mob and KLRC mob will keep it safe for you and your family. If you want one, I can also give you a DVD of some of the recordings for you to keep.

I will use what we learn about you and your family's language for my job at Macquarie University. I will write about the language in books, articles and on my website. I will also talk to people about what I learn in classes at the university, workshops and at conferences.

Any information you provide will be kept private (confidential). If I put some bits of conversation in a book or a paper, maybe you don't want your name there next to the words you said. Or maybe you do. I can put a made up name, your bush name, your whitefella name. I can put your skin name, a nickname, or an initial like JB, or MK. You can tell me whatever you would like me to put. If you change your mind, that's OK but you should try and tell me as soon as you can, so I can change it. Whatever you decide, some people might still be able to guess that you said something to us but I won't use any information you don't want us to.

If someone dies, I won't say their name until it becomes OK to say that name again. You can tell me what you think I should do about the names of people that die.

Your participation in this project would be greatly appreciated. If you have any questions you can contact Joe Blythe on 02 9850 8089 (w), [REDACTED] (mob) or at joe.blythe@mq.edu.au, or Josua Dahmen on [REDACTED] or at josua.dahmen@students.mq.edu.au, or Caroline de Dear on [REDACTED] or at caroline.de-dear@hdr.mq.edu.au. If you have any worries about the project you can also call the Executive Officer, Human Research Ethics, Macquarie University, ph: 02 9850 4459, ethics.secretariat@mq.edu.au

Thank you

Joe Blythe, Josua Dahmen and Caroline de Dear



Consent form

Project Title: Endangered conversations in East Kimberley languages

Name of participant: _____

Name of researchers: Dr Joe Blythe, Josua Dahmen, Caroline de Dear _____

Plain Language Consent Form

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Joe/Josh/Caroline has explained to me the type of work they want to do with me. I understand that this is for research only for the researcher's jobs and studies at Macquarie University. I understand that I will be recorded with video and audio. I might be recorded talking with friends and family about anything I want to talk about.

I want to work with Joe and Josh on their project on conversation. I know I will be video-recorded and photographed. I know that I don't have to do this and can stop working at any time. I know I don't have to say anything I don't want to.

I know that I will be paid \$50 for recordings in the bush, or \$100 if we talk for a long time.

I know that the tape and video recording will not be played to those that aren't researchers listed above (within legal limitations) unless I say this is OK:

I am happy for other people to listen and watch recordings of me talking language:
YES / NO

I know that the recordings we make will be stored at the Kimberley Language Resource Centre in Halls Creek and at AIATSIS in Canberra if I say this is OK:

I am happy for recordings of me talking language to be kept at the Kimberley Language Resource Centre and at AIATSIS in Canberra:

YES/YES but with specific restrictions (specify below)/NO

.....

I know I don't have to have my real name used in any books or papers. If I want, Joe can use a different name to name me, or do something else. I have talked about what to do about names with Joe/Josh/Caroline. My preference is:

.....

I know that even if my name isn't be used, some people might be able to guess that it was me that said/did certain things.

Signature (Participant) _____

Date _____

Guardian's Signature (if child participant) _____

Date _____