Kin-enriched morphosyntax has emerged many times in distantly related Australian languages. An examination of language use in conversation reveals that this emergence can be explained in terms of convergent evolutionary pressures. All Australian Aboriginal societies have classificatory kinship, and all have taboos limiting the use of personal names. A conversational preference for avoiding restricted names (Levinson 2007) and preferences for achieving recognition and being succinct (Sacks & Schegloff 1979, Schegloff 1996) provide selection principles that assist speakers in choosing the most suitable expressions for the given occasions of reference. Because kin-based expressions are not names, but are nevertheless useful for securing recipients' recognition of referents, they are regularly selected when names are unsuitable. Through repeated selection in conversation, the same preferences ultimately drive the diachronic development of kin-based morphosyntax. The Murrinh-Patha case study in this article presents the development of kin-based morphology through reanalysis. It then draws on fragments of face-to-face conversation exemplifying how conversational pressures bias the selection of kin-based structures. Finally, the micro- and macrocausal domains are linked through an ‘invisible hand’ explanation (Keller 1994).*

Keywords: social interaction, preference organization, structuration, kintax, micro/macro interactions, convergent evolution

I. INTRODUCTION. Language change does not happen in a vacuum. It takes place within conversational interaction where it is driven by speakers’ personal objectives and needs. These objectives and needs are both prescribed and constrained by interactional contingencies and by societal values and preoccupations. Yet the directions in which changes proceed are not consciously designed by speakers because of perceived benefits. As Evans (2003a:15) puts it, ‘[s]peakers do not plan to create accusative cases, pluperfects, or ejective stops, but they do intend to communicate clearly, locate what they describe in time, or sound like (or unlike) target groups’. Certain types of constructions are well disposed toward satisfying interactional and cultural constraints, and the repeated selection of these sorts of constructions, under similar sets of circumstances, can ultimately lead a language down a grammaticalization pathway.

The comparative method and computational phylogenetics are broad macroscopic approaches that study language evolution by seeking longitudinal evidence for phonological, lexical, and morphosyntactic change across language families. These techniques provide for the identification of earlier structures and of likely processes and trajectories of change. Such techniques, however, provide little insight into the social factors that drive these changes.

Variational sociolinguistics is concerned with identifying the social motivations for linguistic change. The techniques employed allow researchers to track linguistic inno-

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vations as prestige forms sweep from one subgroup of a linguistic population to others. The methods present snapshots of identified selection processes that can be extrapolated longitudinally to predict likely evolution in progress. Yet these methods provide only limited insight into speakers’ pragmatic motivations for selecting a particular sociolinguistic variable over another. For instance, they are not well equipped to explain speakers’ motivations when they do not select prestige forms—that is, when macrosocial factors (own peer group, appropriate environmental setting, etc.) would otherwise predict their probable selection.

Microanalytic approaches that draw on naturally occurring interactional data (conversation analysis, interactional linguistics, discursive psychology, etc.) are better equipped for explaining pragmatic effects of particular linguistic utterances in particular sequential environments, yet researchers in these fields have been either unconcerned with or reticent about extending their findings beyond the here and now of face-to-face interaction. Almost none, it seems, have considered extrapolating into diachrony.  

This is unfortunate because the social motivations and conditions governing lexical choice are absolutely the concern of historical linguistics. Studies of diachronic processes that are informed by genuine naturalistic conversational pragmatics are powerfully able to inform theories of linguistic evolution.

This article attends to an evolutionary puzzle that historical linguistics has thus far been unable to solve. Australian languages that are only distantly related have independently innovated a wide variety of specialized kin-based or sociocentric linguistic structures (Hale 1966) (see below). While such ‘kintactic’ structures (Evans 2003a) have also been attested elsewhere, 2 their predominance in Australia raises such questions as: ‘What social conditions led to the proliferation of so many different social divisions being reflected in grammar?’, and ‘What sorts of desired pragmatic effects might have led to these multiple evolutions?’ While certain proto-language forms and grammaticalization pathways have been identified (e.g. Blythe 2010a, Dench 1997), we know little of why these forms arose. Informal conversation conducted in the Murrinh-Patha language provides insight into why, on certain occasions, speakers select kin-based linguistic structures, and on other occasions they do not. It is in the organization of the conversational preferences relating to word selection, and in particular to person reference, that we find evidence for the social motivations for speakers selecting kin-based linguistic structures. By driving speakers’ word selection, these same conversational preferences ultimately, over the centuries, drive the grammaticalization of kin-based linguistic structure.

While special avoidance registers have been reported for many Australian languages, some of which have quite generalized lexicon and grammars (that is, semantically less specified than their everyday language counterparts), the effect of taboo-related name avoidance has not previously been linked to the innovation of specialized grammatical structures within the everyday language (as opposed to the grammar of specialized avoidance registers). I argue that the many varieties of kin-enriched morphosyntax have been evolving as a result of cultural selection processes that are observable within face-to-face interaction.

I first review the range of specialized kin-based lexicon and morphology within Australian languages (§2), showing that many have developed through processes of convergent evolution. I then provide a capsule review of historical research more fully described in Blythe 2010a showing that Murrinh-Patha’s fusional ‘nonsibling’-gender-number markers were reanalyzed from other sources (§3). This grammaticalization process re-

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1 A notable exception is Gipper (2011).
2 For example, Brazil (Lea 2004) and Papua New Guinea (Nash 1974, Whitehead 2004).
sulted in massively expanded, highly kintactic, pronominal paradigms. In §4 I demonstrate how various types of kin-based morphosyntax satisfy design constraints required by particular conversational preferences, and how, when necessary, other preferences must be relaxed in order to achieve interlocutors’ most prioritized referential requirements. In particular, I demonstrate some of the operationalized advantage that these expanded kintactic pronominal paradigms bring, particularly when taboos on particular personal names demand circumspection about their usage. I conclude by demonstrating that the microlevel operations visible within interactional timescales are temporally and causally linked through invisible-hand effects to macrolevel structuration of kin-based linguistic structure, observable within diachronic timescales (§5).

2. THE EVOLUTION OF KINTAX AND SPECIALIZED KIN-BASED EXPRESSIONS. Within Aboriginal Australia, certain cultural features appear to have been consistently present across the continent. One such feature is taboos that restrict the use of certain personal names, especially between certain classes of kin. Although diverse in their application, naming restrictions between mothers- and sons-in-law seem to have been very widespread (Berndt & Berndt 1988 [1964]:83), if not ‘pan-continental’, as were restrictions on naming the recently deceased. Furthermore, the extension of a taboo from an individual person’s name to the namesakes of the tabooed individual was exceedingly common, if not a pan-continental feature. In many parts of the country, taboos on naming the deceased were also extended to homophones or near homophones of the name to be avoided (Dixon 1980, Douglas 1964, Nash & Simpson 1981).

Another pan-continental cultural trait is classificatory kinship. While the systems might differ typologically, certain principles underpinning their operations (such as the unlimited merging of same-sex siblings, the incorporation of affinal kin into the same kinship categories as consanguineal kin, and so forth; Radcliffe-Brown 1930, Scheffler 1978) seem to hold true across the continent. With indefinitely extending classificatory kinship systems, every individual in the social universe is potentially relatable as kin. As such, once a linking relative has been established, there will always be an available kinterm for reference to every individual. While name avoidance does not prescribe the use of kinterms in the place of names, it does bias their selection. These pan-continental commonalities relating to language use are matched by multiple independent innovations of kin-based linguistic structures in languages that are not closely related.

Evans (2003a:23–24) describes ‘kintax’ as ‘the obligatory coding of kinship or moiety relations in core grammar’. Kinterms map understood relationships between individuals. Kinship relationships are calculated from the perspective of a propositus or anchor, the person from whom the kinterm is reckoned. For example, in the expression my father, the propositus for the kinterm father is the current speaker. Sociocentric systems such as moieties, subsections, sections, and so forth map kin-like relationships between the various societal divisions, irrespective of the individuals that compose them. They tend to map onto kinship systems with varying degrees of accuracy. In this light, kintax is mostly

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3 Moieties are two-way societal divisions, typically characterized by vertical lines of (patrilineal or matrilineal) descent and exogamous marriage. Every individual belongs to either one moiety or the other. Sections are four-way divisions, whereas subsections are eight-way divisions. For a comprehensive introduction to Australian social organization, see Berndt & Berndt 1988 [1964].

4 For example, section systems, which have four divisions, map neatly onto Kariera-type kinship systems, which have two lines of patrilineal descent. Most subsection systems (eight divisions) have a gender distinction, effectively giving sixteen distinct subsection terms. These neatly map onto Aranda-type kinship systems, which distinguish four lines of patrilineal descent. The Jawoyn, however, have both a Kariera system and gender-distinguished subsections, giving a two-to-one mapping between kinterms and subsections (Merlan 1989), allowing individuals to permute kinterms from given subsection terms, but not the other way around.
thought of as morphological affixes or kin-based pronouns. The grammaticization of kinship categories was first described by Ken Hale, who noted that:

in some Australian languages a principle which is a proper part of the kinship system also functions as an important principle of opposition within a grammatical paradigm … . The intrusion of the kinship system into this portion of the grammar results in the circumstance that a syntactic rule is required to make reference to features normally regarded to be outside the domain of grammar. (Hale 1966:319–20, also cited in Evans 2003a:24)

The polysynthetic language Dalabon (Alpher 1982) exemplifies the sorts of syntactic rules that Hale was referring to. Dalabon has two separate series of dual pronominal prefixes. The choice of prefix used depends on whether the participants being referred to belong to ‘harmonic’ or ‘disharmonic’ generation sets (see Table 1). Participants in harmonic generation sets are those in the same generation as each other (e.g. siblings, spouses, etc.), as well as those who differ by two generations (e.g. grandparents and their grandchildren)—effectively, people of even-numbered generations. By contrast, persons separated by only one generation (i.e. fathers and sons, aunts and nephews, etc.) are said to be in disharmonic generation sets. For pairs in a harmonic relationship, such as a pair of siblings, prefixes are chosen from the harmonic set, as with *yarrah-* in example 1.5 Reference to disharmonic pairs is done with a prefix from the disharmonic set, as with *ngeh-* in example 2, which cross-references a father-and-son pair.

<table>
<thead>
<tr>
<th>HARMONIC</th>
<th>DISHARMONIC</th>
<th>PERSON</th>
</tr>
</thead>
<tbody>
<tr>
<td>yarrah-</td>
<td>ngeh-</td>
<td>1DU.EXCL</td>
</tr>
<tr>
<td>yah-</td>
<td>djeh-</td>
<td>1DU.INCL</td>
</tr>
<tr>
<td>narrah-</td>
<td>deh-</td>
<td>2DU</td>
</tr>
<tr>
<td>barrah-</td>
<td>geh-</td>
<td>3DU</td>
</tr>
</tbody>
</table>

Table 1. Dalabon intransitive dual pronominal prefixes.

(1) Dalabon: harmonic generations
Ngey wulung-ngaŋ yarrah-bon.
1SG yBr-1SG.POSS 1DU.EXCL.HARM-go
‘My younger brother and I go.’
(2) Dalabon: disharmonic generations
Ngey bulu-ngaŋ ngeh-bon.
1SG Fa-1SG.POSS 1DU.EXCL.DHARM-go
‘My father and I go.’

The Central Australian language Kaytetye has three series of kin-based pronouns (Koch 1982). In addition to the principles of harmony and disharmony, Kaytetye follows the principle of agnation—whether all participants pertain to the same patrimoiety or to different patrimoieties.6 If all participants belong to the same patrimoiety and the same generation set, then a harmonic pronoun is chosen, such as the third-person dual form *erlwe-me* for the pair of brothers in 3. If all participants belong to the same patrimoiety but to disharmonic generation sets (e.g. father and child), then a disharmonic pronoun is chosen, such as the third dual form *erlw-ake* in 4. If all participants do not belong to the same patrimoiety, then, irrespective of their generation sets, a pronoun from the ‘opposite patrimoiety’ set is chosen, such as the third dual form *erlw-antehe* in 5.

5 Morphological glosses and kinship abbreviations used in this article are listed as an appendix. Unless otherwise indicated, all examples cited are taken from my own fieldnotes or field recordings, and are labeled accordingly with filename_timecode (in milliseconds).

6 In a patrimoiety system, each individual (along with his or her siblings) belongs to the same patrimoiety as his or her father (and his siblings).
Examples 3–5 also illustrate a second type of kintactic phenomenon. The dyadic suffix -nhenge is a specialized dual suffix to kinterms that marks a kin relationship between a pair of individuals. In Kaytetye, where said relationship is not reciprocal, the suffix attaches to the senior partner of the pair. Kinship dyads and kin-group affixes are widely attested across the continent (Evans 2003b, 2006a, Merlan & Heath 1982) (see Fig. 2 below). While it is clear that some of these affixes are related (e.g. Dench 1997, Evans 2003b), there appear to have been multiple independent innovations.

In addition to their regular (nominal) kinterms, a handful of Australian languages, such as the closely related languages Ilgar and Iwaidja, have kinship verbs. Evans (2000, 2006b) defines kinship verbs as those that express a kinship predicate of the type ‘<X> be (a) K [to <Y>]’, where K is a kinship relation. Thus, in 6 the seeker’s relationship to his own wife is expressed with the morphologically transitive kinship verb iny-imagan, literally meaning ‘he is husband to her’. In Ilgar and Iwaidja, kinship verbs tend to be used for close kin rather than more distant classificatory kin, for which the nominal kinterms are used (Evans 2000:119–20).

(3) Kaytetye: same patrimoity, same generation set (Koch 1982:69)
nhe-therrarte erlwe-me alkeren-henge alpe-nke amperewarle
that-DU 3DU-HARM eBr-DYAD return-PRS camp-ALL
‘Those two brothers are going back to the camp.’

(4) Kaytetye: same patrimoity, different generation set
(nhe-therrarte erlw-ake arweye-henge alpe-nke ampere-warle
that-DU 3DU-DHARM father-DYAD return-PRS camp-ALL
‘Those two—father and child—are returning to the camp.’

(5) Kaytetye: opposite patrimoieties
(nhe-therrarte erlw-anthe arrengkwe-henge alpe-nke ampere-warle
that-DU 3DU-OP mother-DYAD return-PRS camp-ALL
‘Those two related as mother and child are returning to the camp.’

Ordinary kinterms encode (whether overtly or covertly) the relationship between the referent and a propositus (anchor). For example, in Bininj Gunwok the ordinary addressee-anchored kinterm nakurrng ke is used for reference to the addressee’s mother’s mother’s brother’s son (MoMoBrSo; see Figure 1, left) (Garde 2002:157). Several Australian languages also have semantically complex ‘tri-relational’ kinterms (Evans 2003a, Garde 2002, Laughren 1982, McGovern 1982, McGovern & Obata 2006, McGregor 1996, Merlan 1989)—terms that effectively have two propositi. Tri-relational kinterms encode relationships between each propositus and the referent, and between each of the two propositi (see Figure 1, right). Thus, if the individual referred to previously is the speaker’s nephew, he could also be referred to in Bininj Gunwok with the tri-relational kinterm ke nakurrng, which means the person who is the addressee’s mother’s mother’s brother’s son (MoMoMoBrSo) and the speaker’s sister’s son (ZiSo), given that the addressee is the speaker’s daughter’s child (DaCh) (Garde 2002:422).

Time and time again unrelated Australian languages have evolved a variety of kin-enriched phenomena that include tri-relational kinterms, kin-based affixes, kinship
verbs, and kin-inflected pronoun paradigms. These specialized kin-based expressions exist alongside the regular set of ordinary kinterms, thus expanding the suite of kin-based person-reference items available to interlocutors. Figure 2 shows some of their distribution. These kin-enriched phenomena are the outcome of cultural selection resulting from pressures exerted by conversational preference structure. While the most demonstrable pressure is the preference for avoiding restricted names, we see in § 4 below that other preferences are also important in driving these convergent evolutions.⁷

⁷ Name avoidance and classificatory kinship need not have driven all languages in the direction of kintax. In central Australia, death taboos were so strong that for a number of years women in mourning ceased to speak altogether. As a result, (nondeaf) sign languages have developed that have strong relationships with the
Not only can kinship systems and sociocentric systems prescribe certain patterns of behavior, but they can also both constrain and enrich the person-reference system. The most obvious constraints are those that restrict the use of personal names for certain types of kin (e.g. affines, siblings), making it necessary to choose other referential options. They enrich the system by providing more categories into which members of the social universe can potentially be grouped. The more options that exist for categorizing groups of individuals, the more ways there are to refer to them as groups—thereby providing a useful strategy for circumventing problematic names. More group-reference options allow differently construed groups of individuals to be referred to in ways that contrast various group domains (e.g. a pair of siblings vs. a group of three or more non-siblings containing at least one female), even though the membership of these groups might overlap. Because all kin-based pronouns, kin-dyads, and kin-group affixes are person-reference items that are not names, they are potentially usable for securing recipients’ recognition of referents when name avoidance prescribes against the use of particular problematic names. Just how useful this strategy is becomes apparent in §4.2.

I wish to stress that name avoidance does not demand the selection of kinterms or other kin-based expressions. Kinterms are regularly used when circumspection is not warranted, and non-kin-based expressions such as nicknames and descriptions are regularly selected when circumspection is warranted. Name avoidance does not require the selection of any particular reference forms; it merely prefers the nonselection of those restricted names. Because there are many names that should potentially be avoided, name avoidance is an ever-present issue. There is always the possibility that kinterms and kin-based referential expressions have been selected either because the referent’s name should be avoided, or because the referent shares the same name as someone whose name should be avoided. Under these circumstances, their utility biases their selection. As such, all kinterms or kin-based expressions can be inspected for why they are being used. They thus become interactional flagbearers for possible name avoidance.

Having provided a synchronic overview of the phenomena under investigation, I now provide a diachronic account of how Murrinh-Patha’s fusional markers of gender, number, and siblinghood were grammaticalized from unrelated sources.

3. MURRINH-PATHA’S PRONOMINAL/VERBAL KINTAX AND ITS DIACHRONIC DEVELOPMENT. Murrinh-Patha and neighboring Ngan’gityemerri are the only members of the Southern Daly family (Green 2003). They are both polysynthetic, head-marking languages with bipartite complex predicates made up of an inflecting classifier stem and a noninflecting lexical stem (Blythe 2009a, Nordlinger 2010, Reid 1990, 2003, Seiss & Nordlinger 2010), yet only Murrinh-Patha has verbal or pronominal kintax. The similarity in their verb structure can be seen by comparing 7 and 8, where cognate morphemes surface in similar positions within the languages’ respective verbal templates. Particularly noteworthy are the two number markers -nime (Ngan’gityemerri, trial) and -ngime (Murrinh-Patha, paucal feminine nonsibling).

spoken languages (Kendon 1988). Many of these regions have dedicated ‘no-name’ substitute words that are used for reference to namesakes and to place-namesakes of a deceased person (Nash & Simpson 1981). These domains are not mutually exclusive. Warlpiri (see the map in Fig. 2) has a dedicated no-name word kumunt-jayi (Nash & Simpson 1981), a non-deaf sign language used by women (Kendon 1988), trirelational kinterms (Laughren 1982), and a kin-dyad suffix (ibid.).
(7) Ngan’gityemerri
Alayi warrakma kinyi werrme ngi pul nime tye
mother three this 3PL.SB.hands-1SG.DO-wash-TRIAL.PIMP
‘These three mothers of mine used to wash me.’

(8) Murrinh-Patha
Kardu palgun perrken’gungime pumengipurlthangimeparde.
human woman three.F
pume ngi -purl -tha ngiene =parde
3NSG.SB.hands.PIMP-1SG.DO-wash-PIMP-PAUC.F.NSIB=3DAUC.SB.4BE.PIMP
‘The three women who were not all sisters used to wash me.’

Although their initial nasals differ (see below), the two number markers are cognate. They also differ slightly in grammatical number (trial vs. paucal), and the Murrinh-Patha form additionally marks gender and ‘siblinghood’. Murrinh-Patha -ngiene is one of four fusional nonsibling-gender-number markers, which are given in Table 2.

<table>
<thead>
<tr>
<th>Dual</th>
<th>Paucal</th>
</tr>
</thead>
<tbody>
<tr>
<td>Masculine (all males)</td>
<td>-nintha -neme/-name</td>
</tr>
<tr>
<td>Feminine (at least one female)</td>
<td>-ngintha -ngiene</td>
</tr>
</tbody>
</table>

Table 2. Murrinh-Patha’s four fusional nonsibling-gender-number markers.

These four morphemes have permeated all pronoun paradigms, resulting in a three-way gender and siblinghood contrast in both dual and paucal number (see Table 3). This three-way contrast is demonstrated in examples 9–11, in which a pair of male nonbrothers (9) is contrasted first with a pair of nonsiblings made up of at least one female (10) and then with a pair of siblings, gender unmarked (11). The ‘sibling’ reading is signaled by the absence of a nonsibling-gender-number marker.

(9) Danininthariwakthadharra.
dani -nintha -riwak -dha -dharra
3SG/DU.SB.19POKE.PIMP -DU.M.NSIB-follow-PIMP-moving
‘The two male nonbrothers (♂♂) were following.’

(10) Daninginthariwakthadharra.
dani -ngintha -riwak -dha -dharra
3SG/DU.SB.19POKE.PIMP -DU.F.NSIB-follow-PIMP-moving
‘The two nonsiblings, at least one of whom was female (♀♀ or ♂♀), were following.’

(11) Parraneriwakthadharra.
parrane -riwak -dha -dharra
3DU/PAUC.SB.19POKE.PIMP -follow-PIMP-moving
‘The two siblings (♂♂, ♂♀, or ♂♀) were following.’

The two dual forms -ngintha (DU.F.NSIB) and -nintha (DU.M.NSIB) do not have cognates in Ngan’gityemerri. These forms are a Murrinh-Patha innovation. They have been reanalyzed from a now defective paradigm of ethical dative bound pronouns in which -ngintha and -nintha appear as third singular feminine and third singular masculine forms, respectively. Clues as to this origin are revealed by comparing these markers’ positions within the Murrinh-Patha verb template (see Table 4) to those of the ethical datives.
Murrinh-Patha has three series of object pronouns. The ethical dative (ED) pronouns, like the direct (DO) and indirect object (IO) pronouns, are fillers of the (iii) number-marking slot. This can be seen in 12, 13, and 14 where ethical dative, direct obj-
ject, and indirect object pronouns, respectively, fill this slot. In each of these examples, the (ix) number-marking slot is filled by a nonsibling-gender-number marker that marks the object number as dual, the siblinghood status as nonsibling, and the gender as either masculine (as in 12 and 13) or feminine (14).

(12) Nandji buywinthuwurkkpurknunininthah. (Flynn n.d.:6)
   nandji buy -winthu -wurkkpurk -nu -nintha
   NC:RES 3SG.SB.18.FUT-3DU.ED-break -FUT-DU.M.NSIB
   i iii vi vii ix
   ‘The thing will break on them (two males, who are not brothers).’
(13) Nganan’gunggarrunininthah. (2005 Fieldnotebook 3, p. 27)
   nga -nan’gu -nggarr-nu -nintha
   3SG.SB.19Poke.FUT-2DAUC.DO-show -FUT-DU.M.NSIB
   i iii vi vii ix
   ‘I’ll show you two men who aren’t brothers.’
(14) Pumamngarrubertingininthah. (Sorrow 20040808JB03b_309840)
   pumam -ngarru -berti -ngintha
   3NSG.SB.8hands.NFUT-1DAUC.EXCL.IO-take.person-DU.F.NSIB
   i iii vi ix
   ‘They bought her to see us two (at least one of whom was female and not my sibling).’

A brief word on Murrrinh-Patha number marking. The main verb’s number-marking slots (iii) and (ix) can both be filled by the dual nonsibling number markers -nintha and -ngintha (whereas the paucals, -nime and -ngime, fill only the (ix) slot). These two morphemes combine with both object and subject pronomininals to mark either object or subject number as dual. Thus, in 13 and 14, -nintha and -ngintha combine with the ‘daucal’ (dual/paucal) object pronouns to mark the objects as dual. However, 15 shows that the same nonsibling number markers, when filling the (ix) slot, can also mark subjects as dual, but only when the object fillers (DO/IO/ED) of the (iii) slot are either singular or plural (but not ‘daucal’). When no overt object pronouns are present, these two morphemes mark subjects as dual by filling the (iii) slot, as 16 demonstrates. The point is that the two morphemes occur in each of the two positions, and that they mark number, gender, and siblinghood of both subject and object arguments.

(15) Nan’gunginthah pana thurdingayitjmaninginthah nguguminggi. (20040704JB01_429832)
   nan’gungintha pana
   2DU.F.NSIB that.you.know
   thurdi -nga -yitj -mani -ngintha nguguminggi
   2SG/3DU_SB.30.FUT -ISG.IO -tell.story -be.able -DU.F.NSIB totem.site
   i iii vi viii ix
   ‘Why don’t you two tell me the story about that totem site?’
   dani -ngintha -riwak -dha -dharra
   3SG/DU_SB.19Poke.PIMP -DU.F.NSIB -follow -PIMP-moving
   i iii vi vii iii
   ‘The two nonsiblings, at least one of whom was female (♀♀ or ♂♂), were following.’

For expansion, see Blythe 2009a, 2010a.
In 17 the (ix) slot is filled by an ethical dative pronoun (-nintha), and the (iii) slot is unfilled. Although the form (-nintha) is the same as the dual masculine nonsibling number marker, the translation of the sentence is singular, not dual. Examples 15 and 16 show that the dual nonsibling number markers fill the same slots in the verbal template (iii and ix) as the ethical datives, as 12 and 17 demonstrate. This is testament to their source. That the third singular ethical datives -nintha and -ngintha inflect for gender makes them useful items for semantic reanalysis.

Ancestrally, the language lacked a siblinghood distinction, and gender was distinguished only in the third singular ethical datives, indirect objects, and free pronouns. The morphemes -nintha and -ngintha existed only as ethical dative pronouns. When they filled slots (iii) and (ix), they cross-referenced only adversely affected participants. Sentences of the type given in 18 would have allowed only malefactive interpretations (but not dual interpretations).

(18) pre-Murrinh-Patha (ancestral state)
*ku manganinthartngarra da
ku mangan -nintha -art ngarra da
NC:ANM 3SG.SB.9Snatch.NFUT-3SG.M.ED-get/take LOC camp
i iii vi
‘He (or she) took the meat home, to the other man’s disadvantage.’ (In modern Murrinh-Patha, this reads: ‘The two men who weren’t brothers took the meat home’; compare 9, 10.)

Because the ethical datives were already fillers of slots (iii) and (ix), the third singulars were available for distinguishing pairs of adversely affected participants by gender. Thus pairs of adversely affected males (19) could be distinguished from pairs of females and mixed pairs (20).

(19) pre-Murrinh-Patha
*ngambinthuwintharrkatnintha
ngam -winthu -wintharrkat -nintha
1SG.SB.19Poke.NFUT-3DU.ED-prevent -3SG.M.ED
i iii vi ix
‘I prevented the two men (♂♂) from doing something.’

(20) pre-Murrinh-Patha
*ngambinthuwintharrkatngintha
ngam -winthu -wintharrkat -ngintha
1SG.SB.19Poke.NFUT-3DU.ED-prevent -3SG.F.ED
i iii vi ix
‘I prevented the two women (or man and woman, ♀♀, ♂♀) from doing something.’

This allowed -nintha and -ngintha to become reanalyzed as gender-number markers, which in turn allowed gender marking to be extended to other sorts of objects (IO, DO). The siblinghood distinction effectively came for free, simply by leaving off the gender-number markers when pairs of siblings were referred to (see Table 3). As fillers of slots (iii) and (ix), the newly reanalyzed morphemes became available for marking gender,
number, and siblinghood of subjects. They also permeated the free pronoun paradigm (see Table 3). These processes would have rendered the entire ethical dative series less productive, principally because its highest-frequency members became interpretable first and foremost as markers of gender, number, and siblinghood.

Gender marking in the paucals is best accounted for in terms of paradigmatic pressure, whereby a single Proto-Southern Daly trial trial marker (most likely -nime) was reanalyzed as the masculine paucal number marker in modern Murrinh-Patha. The pre-Murrinh-Patha *-nime is likely to be derived from the numeral ‘one’, which in modern Murrinh-Patha is realized as numi, or occasionally nimi (also ‘other/another’). This surfaces in the numeral perrken gunumi ‘three’, which is a compound derived from the numeral ‘two’ (perrken’gu) plus ‘one’ (numi). Once pre-Murrinh-Patha had reanalyzed the third singular ethical datives as gender-number markers, there would have been a robust -n (masculine) vs. -ng (feminine) distinction across the IO and ED series, and in the dual nonsibling number markers—all of which were fillers of the number-marking slots (iii) and (ix) (see Table 5). Of the five possible fillers of slot (ix), two were feminine beginning with /ng/ (-ngintha ‘3SG.F.ED’ and -ngintha ‘DU.F.NSIB’), two were masculine beginning with /n/ (-nintha ‘3SG.M.ED’ and -nintha ‘DU.M.NSIB’), and the fifth, -nime ‘trial’, began, coincidentally, with the same phoneme /n/ as the two masculine fillers. Under these circumstances it would be relatively easy to reinterpret -nime as a masculine trial/paucal number marker, thus leaving a hole in the paradigm that could be readily filled by replacing the initial /n/ with a (feminine) /ng/, resulting in the modern -ngime (PAUC.F.NSIB). Thus by analogy with the dual nonsibling number markers, we arrive at modern Murrinh-Patha in which the three-way contrast in the paucals is simply replicated by marking groups of nonsiblings as masculine (21) or feminine (22), and leaving out the nonsibling number marker for groups composed exclusively of siblings (23).

Table 5. Pre-Murrinh-Patha trial *-nime as compared with certain other fillers of slots (iii) and (ix).

<table>
<thead>
<tr>
<th></th>
<th>3SG.IO</th>
<th>3SG.ED</th>
<th>DU.NSIB</th>
<th>*TRIAL/PAUC</th>
</tr>
</thead>
<tbody>
<tr>
<td>MASCULINE</td>
<td>-na</td>
<td>-nintha</td>
<td>-nintha</td>
<td>-nime</td>
</tr>
<tr>
<td>FEMININE</td>
<td>-nge</td>
<td>-ngintha</td>
<td>-ngintha</td>
<td></td>
</tr>
</tbody>
</table>

(21) Modern Murrinh-Patha
Parraneriwakthanamedharra. (2007 Field notebook 1, p. 35)
parrane -riwak -dha -neme -dharra
3DAUC.SB.19.PIMP -follow-PIMP-PAUC.M.NSIB -moving
i vi vii ix x
‘Several male nonsiblings (♂♂♂♂♂♂) were following it.’

(22) Parraneriwakthangimedharra. (2007 Field notebook 1, p. 35)
parrane -riwak -dha -ngime -dharra
3DAUC.SB.19.PIMP -follow-PIMP-PAUC.F.NSIB -moving
i vi vii ix x
‘Several female (or mixed) nonsiblings (♀♀♀♀♀♀ or ♂♂♂♂♂♂) were following it.’

10 Because I had not at that stage identified a likely source for the Proto-Southern Daly trial/paucal number markers, in Blythe 2010a I provided two plausible accounts for pre-Murrinh-Patha’s development of gender marking in the paucals. The account that is not discussed here is now redundant.
By adding gender and siblinghood inflections to the existent four-way number contrast, Murrinh-Patha achieved significant morphological enrichment of its pronominal paradigms, nearly doubling the number of possible distinctions. This can be visualized by comparing the Murrinh-Patha paradigms in Table 3 to comparable paradigms from Nga’giwumirri, a dialect of Nga’n’giyemerri, given in Table 6, which can be considered analogous to the pre-Murrinh-Patha paradigms, prior to the discussed evolution. What remains to be seen is how this morphological enrichment plays out in daily life. When taboos limit the use of personal names, rich pronominal paradigms are powerful resources that provide genuine referential advantage. We now turn to informal conversation so as to observe how interlocutors use these forms to achieve the sorts of things they need to as they communicate.

Table 6. Ngangiwumirri has fifteen distinct free pronoun and IO combinations, and fourteen distinct combinations for DO and verbal subjects (Reid & McTaggart 2008:345).

4. CONVERSATIONAL PREFERENCES AS GUIDING INVISIBLE HANDS. According to Rudi Keller (1994), linguistic structures emerge as the nonintended consequences of invisible-hand processes resulting from the cumulative similar actions of multiple individuals. Invisible-hand processes are epiphenomena that link the microdomain of actual usage to the macrodomain of structure. He exemplifies with the traffic jam that seemingly emerges from nowhere (Keller 1994:63–64). Many cars are traveling down a busy road at 100km/h when for some reason a driver needs to brake and reduce his/her speed to 90km/h. So as to avoid a collision, the next driver brakes and reduces his speed to 85 km/h, the next to 80km/h, the next to 75km/h, and so on. Before long the line of cars has

---

The invisible-hand metaphor harks back to the eighteenth-century economic theory of Adam Smith (2005 [1759], 2007 [1776]). It has been used many times since then within economics, political science, and sociology to explain micro-macro interactions.
ground to a standstill without the first drivers to slow down even being aware of the consequences of their braking. The emergent traffic jam was the result of cumulative speed reductions by multiple individuals, each of which was performed not so as to cause traffic jams, but to avoid collisions.\textsuperscript{12} Keller argues that language change proceeds along similar lines in that linguistic structures emerge in the multiplicity of similar individual verbal actions being produced for reasons that are not obviously connected to the resultant outcome.

In the remainder of this section we examine, within enchoric timescales (Enfield 2011, 2013a), the activities speakers engage in and their motivations for choosing kin-based linguistic structures. In doing so, we gain insight into why, within diachronic timescales, languages select for such structures. The domain in which this selection process takes place is that of preference organization. The interactional analyses undertaken in this article are generally conversation-analytic, although they are ethnographically grounded in that the kin relationships between all relevant individuals, as well as whether any of them are deceased, have been established.

\textbf{4.1. Preference organization in interaction.} The notion of preference is central to the theoretical underpinnings of conversation analysis (CA) (Pomerantz & Heritage 2013, Sacks 1992). Preferences are organizational principles for conversation that provide structure to conversational interaction.\textsuperscript{13} Preference organization hinges on there being alternative sets of possibly relevant next actions. Importantly, these sets of possibly relevant actions are differentially weighted in ways that are reflected in the structure of talk-in-interaction. As Lerner (1996:304) puts it, ‘[t]he asymmetry of relevant action alternatives is realized through practices that produce systematic advantages for certain types of (thereby preferred) action over other types of (thereby dispreferred) action’. Preference is thus about managing societal expectations about alternative possible behaviors. CA research recognizes preferences for agreement over disagreement with assessments (Pomerantz 1984); for self-correction in repair, rather than other-correction (Schegloff et al. 1977); for offers over requests; and for acceptance rather than declination of offers (Davidson 1984, 1990). Dispreferred alternatives usually reveal aspects of their dispreferredness through the ways that they are packaged (they tend to be delayed, mitigated, etc.), and the responses themselves are often accounted for (Pomerantz 1984).

Within the domain of person reference, conversational preferences amount to referential design principles that guide speakers in how to shape their referential expressions, given that at any moment in the interaction there will be a range of viable referential alternatives. Although viable, these unequal alternatives show differing degrees of suitability for the social actions being conducted in interaction. Interactants deploy the reference forms that are best suited to their interactional project.

One important issue for conversationalists is how to design their talk so their recipients will recognize the referents, without making their reference forms more compli-

\textsuperscript{12} Simulations of emerging motorway shockwaves provide a useful visualization of invisible-hand effects (e.g. http://www.youtube.com/watch?v=jM-6SraJaYs, http://www.youtube.com/watch?v=Ga3_iSC5dk).

\textsuperscript{13} In this respect they are roughly equivalent to Gricean maxims, though maxims are conceptualized differently. Maxims are viewed as assumptions that hearers make about the ways conversationalists normally speak that help them to interpret the speaker’s meaning. They are rules of behavior for the individual, to be adhered to or flouted, as the individual sees fit. CA’s preferences are viewed as organizational principles for society at large. Talk that conforms to a conversational preference is seen by recipients as being unremarkable because it reflects behavior that is normative for members of that society. Talk that does not conform to a particular preference is (usually) notable for its unexpected lack of fit.
cated than necessary to achieve this aim. CA research has shown that two preferences, MINIMIZATION and RECOGNITION (Enfield 2013b, Hacohen & Schegloff 2006, Sacks & Schegloff 1979, Schegloff 1996, 2007), play a part in shaping person references in conversation. These preferences can be framed as in 24 and 25.

(24) MINIMIZATION: If possible, use single (or minimal) reference forms, as opposed to multiple (or excessively lengthy) reference forms.¹⁴

(25) RECOGNITION: If possible, use recognitional reference forms—forms that invite targeted recipients to identify the person being referred to from among the universe of people that they know (about) and that they suspect their interlocutor expects them to know (about).

The preference for recognition therefore deals with securing targeted recipients’ recognition of the referent. Certain sorts of descriptions have this recognitional property, such as ‘the guy you bought your car from’, whereas other descriptions (‘someone’, ‘this guy’, ‘this woman’, etc.) do not invite the recipients’ recognition (Schegloff 1996:459).

Sacks and Schegloff (1979:17) identify proper names (particularly first names) as a ‘basic sort for recognitionals’ in American English conversation because both preferences are simultaneously satisfied by the production of a first name. Sacks and Schegloff revealed that when the preference for using recognitional expressions comes into conflict with the preference for using single (as opposed to multiple) reference forms, the latter preference is relaxed in favor of the former. The fragment in 26 illustrates the process.


1 Ann … well I was the only one other than
2 → .hhh than thee uhm (0.7) mtc! Ford.
3 → Uh Mrs. Holmes Ford?
4 (0.8)
5 Ann → You know the- [the the cellist?
6 Bev [Oh yes. She’s- she’s (a)/(the) cellist.
7 Ann Ye
8 Bev Ye [s
9 Ann [Well she and her husband were there, …

In 26, Ann tries three times to refer to a particular woman and her husband. Her first attempt displays trouble. The word than in line 1 projects a name as forthcoming. In line 2, the break that is filled by an in-breath, the repetition (than thee), the uhm, and the 0.7 second break all display problems with the turn’s progressivity. When the name Fords is ultimately produced, Bev does not produce a token of recognition (such tokens are, according to Schegloff (2007:127–28), commonly uttered following successfully produced recognitional references that display production problems). Ann (line 3) goes on to produce an upward-intoned (try-marked) reference, Mrs. Holmes Ford?, followed by a 0.8 second pause. When no sign of recognition is produced in the space that was left for it, a third (also try-marked) attempt is produced at line 5, the the cellist?. This third attempt is actually produced in overlap with Bev’s display of recognition (Oh yes, line 6), revealing that the try produced in line 3 had in fact proved sufficient for her to recognize the referent.

The three recognitional expressions are ‘single reference forms’ (Sacks & Schegloff 1979). The first, Fords, failed to secure the recipient’s recognition, so ultimately a sec-

ond form and then a third form were produced in order to achieve the goal. As such, minimization (if possible, use a ‘single reference form’) was relaxed twice so that recognition could be achieved, though a single relaxation was ultimately to prove sufficient. The objective of achieving recognition was upheld despite the apparent failure of the initial (minimal) attempt. This is taken to be evidence for the differential weighting of the two preferences. The recurrent pattern (in American English conversation) is for a succession of recognitional attempts (i.e. successive relaxations of minimization). This is taken as evidence for a higher priority being given to recognition over minimization. This pattern seems to hold true for other languages as well (Brown 2007, Hacohen & Schegloff 2006, Levinson 2007, Stivers et al. 2007).

More recent interactional studies of person reference in non-European languages reveal other conversational preferences. Circumspection (Blythe 2009a, Garde 2008, Levinson 2007) and, to a lesser degree, Association (Blythe 2010b, Brown 2007, Stivers 2007) are relevant to the present article since both surface in conversational Murrinh-Patha.

Circumspection emerges from Levinson’s work on Rossel Island. As in Australia, there are numerous taboos on Rossel restricting the use of personal names, particularly for direct reference to certain in-laws and for direct reference to the recently deceased (Levinson 2007:40). Because the default forms for recognitional reference are personal names, the preference for circumspection can be framed as in 27.

(27) Circumspection: If possible, observe culturally specific and/or situationally specific constraints on reference and avoid the default reference forms.

As such, circumspection need not be a preference dealing only with name avoidance. However, on Rossel Island (as well as in Wadeye, Western Arnhem Land (Garde 2008), and, seemingly, the whole of Australia) it can be construed as a culturally specific preference for not using restricted personal names under conditions of taboo.

In the fragment in 28, not only does N avoid naming a tabooed affine, but his interlocutors are also forced to guess the person’s identity. So doing, they provide guesses that also avoid producing the person’s name.

(28) Yéli Dnye (Levinson 2007:60–61, ex. 20)

1 N wu dmââdi a kêdê Thursday ngê anê lôó ← minimal description
   ‘That girl told me she would go across on Thursday.’
2 (0.6)
3 P n:uu ngê? ← person-specific RI
   ‘Who did?’
4 (0.8)
5 N °(yi dmââdi)° ← minimal description
   ‘That, mentioned girl’
6 (1.2)
7 P Mby:aa tp:oo módô (ngê) ← 1st guess
   ‘The daughter of Mby:aa did?’
8 (0.6)
9 M Kpâtuta u kpâm? ← 2nd guess
   ‘Kpâtuta’s wife?’
10 (1.2)
11 P [Kpâtuta u kpâm? ← repeat of 2nd guess
    ‘Kpâtuta’s wife?’

15 Framed in this manner, circumspection accounts for situations such as press conferences where speakers are normally introduced with full names and titles, rather than first names, which would otherwise be the default terms used in conversation for introducing new referents.
12 M  [ee! ee! kí [tpókni mwi lee dmyino, Stephen a kwo, [mwi lee dmyino ó!  
‘Hey kids go over there, Stephen is here, go right over there!’

13 N  [EBF  [Head-point East

14 P  [Kpâtuta u kük nwe apii?  
‘Kpâtuta’s widow right?’  ← 3rd guess

15 N  [(kí dmââdî)  [EBF mm  ← assent
‘(That girl) You got it.’

In 28, N introduces a tabooed referent (his own daughter-in-law) with a minimal description *wu dmââdi* ‘that girl’ \(^{16}\) (line 1). After a brief silence, P other-initiates a repair (line 3) with a person-specific repair initiator (RI). Following further silence (0.8 seconds, line 4), N recycles the reference form ‘that girl’ (sotto voce), though this time using an anaphoric demonstrative, ‘that girl previously mentioned’. Following a notable silence (1.2 seconds, line 6), N’s interlocutors produce two guesses (lines 7 and 9), both of which are composed of kinterms. In the silences that follow these guesses, N does not produce any signs of assent. In line 11, P repeats M’s previous guess, ‘Kpâtuta’s wife’ (in overlap with a turn that instructs a group of children to move on). In reply, N produces a slight eyebrow flash (EBF; line 13), which signals assent. This is followed by a head-point to the east, to the referent’s place of residence. The third guess, ‘Kpâtuta’s widow’, is produced in overlap with N’s third reworking of the minimal description, ‘that girl’ (line 15). Kpâtuta’s widow is an upgrade in specificity from the previous guess, Kpâtuta’s wife, because the number of potential Kpâtutas is greatly reduced (the husband, N’s own son, is deceased). Assent is displayed by a stronger eyebrow flash (line 15), thereby signaling that P had guessed correctly. In this fragment minimization is multiply relaxed so that circumspection can be upheld.

For the Murrinh-Patha speakers of Wadeye, in Northern Australia, traditional Aboriginal names are intimately connected to the individual’s persona. Many are also the names of plant or animal totems belonging to the individual’s patriline, or place names of totemic sites located on the individual’s clan estate. They also have names of European origin. All such names are subject to naming taboos.

Murrinh-Patha speakers observe strong taboos on naming the recently deceased. Names will be avoided indefinitely when talk takes place within earshot of close relatives of the distantly deceased. Mothers- and sons-in-law avoid each other’s presence. This taboo includes strong name avoidance. There is also strong name avoidance between opposite-sex siblings and opposite-sex cousins, and weaker name avoidance between same-sex siblings and other affines. Restrictions on all names extend to the namesakes and place-namesakes of the person to be avoided (Stanner 1937). For every individual in any conversation, there are potentially hundreds of names that should be avoided, whether as a result of decease, or of kin-based taboos applying either to the individuals themselves or to their interlocutors. Despite this, personal names are frequently used in conversation for both address and reference. Numerical counts of initial references to identifiable individuals show that names are the default recognitionals for initial references to persons.\(^{17}\) In short, if no restrictions apply to a particular name, then the name will be the unmarked form for recognitional references in initial reference positions.

\(^{16}\) Levinson (2007:41) states that demonstrative *wu* is for referents that are ‘non-visible or indirectly ascertained’.

\(^{17}\) From eight conversations (seven multiparty, one dyadic, eighty-nine minutes in total), 118 first-mentions of nonpresent third persons were collected, excluding the nonrecognitional plural references (e.g. *They used to tell us ...*, where whoever they were is unimportant) and references to persons within view of the speaker. Despite name avoidance being relevant for at least 15.3% of these (and possibly relevant for 23.7%), 47.5%
In Murrinh-Patha interaction, circumspection regularly comes into conflict with recognition and minimization. This is because personal names, the forms that normally satisfy each of these latter preferences, are precisely the forms that circumspection prescribes against. When a conflict of this kind arises, minimization usually yields to circumspection, although, as we see in the fragment in 29, this need not be the case. The fragment shows that when a restricted name is produced, it bears design features that reveal it to be produced as a dispreferred response.

(29) Longbum Dinner (20040912JB04_871240)

1 Edna ↑Nanggalardu, (.) ↓dannyiyerr↓ngime↓
nanggalardu
who
dam -nyi -yerr -ngime
3SG/DU.SB.19.NFUT -1NSG.INCL.DO -inforM -PAUC.F.NSIB
‘Who was it that told us that story?’

2 (0.15)
3 Mona <MaKA[:RDU] warda>;
ma- kardu warda
NEG-living.human TEMP
‘He isn’t around any more.’

4 Edna [xxxxx] ← hint/account

5 (1.6) ← failure to remember
6 Edna Nanggalalu;
nanggalal =yu
who =DM
‘Who was it?’

7 (1.3)
8 Mona °Birrarriya.°=
Birrarri =ya
man’s.name =DM
‘Birrarri.’

9 (0.5)
10 Edna Ah nyinika bere tjimgime=
Ah nyini-ka bere tjim -ngime
COS ANAPH-TOP finish 1NS.INCL.SB.1SIL.NFUT -PAUC.F.NSIB
‘Oh, that’s right, we were sitting down’

11 =dan nan panguwathu;
da nan pangu-gathu
NC:PLT what’s.its.name DIST -toward
‘at what’s that place over there.’

Immediately before the fragment in 29, Mona recounted a funny story that she and her sister Edna had been told long ago. At line 1 Edna asks Mona to remind her who had told them the story. Information requests about persons expect recognizable references (e.g. names). Mona’s reply (‘He isn’t alive any more’, line 3) does not reject the request out of hand (after all, descriptions of referents can lead to identifications). Rather, it accounts for not complying in the expected manner. The reference to decease hints that perhaps the name should not be mentioned and that Edna should try to remember a

were done with bare names, with a further 11% being complex reference forms that included names (e.g. my uncle Batjuk).
funny person that has passed away. The 1.6 second pause (line 5) suggests that Edna is unable to recall which deceased person had told the story. The *Nanggalyu* ‘who’ delivered at line 6 is not merely a reissued request, but it also serves as a go-ahead for Mona to provide the information, despite the evident problematicity with the name. Mona grants this request in line 8 by producing, sotto voce, the name *Birrarri*. Birrarri was Mona’s husband who has been deceased for quite some years.

The dispreferred nature of the given response is revealed in the soft production of the eventual name, the delay provided by Mona’s hinting account (an account that seeks an alternative course of action), and the 1.3 second delay at line 7. This dispreferred packaging displays Mona’s reticence about producing the name of her late husband. Levinson (2007:56–57) also found that when Rossel Islanders pressed a teller to reveal the identity of certain in-laws with restricted names, the tellers also sometimes relented and pronounced the names beneath their breath. In this fragment, circumspection (along with minimization) is relaxed in favor of recognition. It is exceptional, however, in that recognition is normally relaxed in favor of circumspection.

The forms most frequently used when circumspection is relevant are kterms. Because we are concerned with the evolution of morphosyntax, however, we now examine how pronominal/verbal kintax can be utilized to handle name-avoidance requirements.

4.2. Circumspection and the selection of pronominal/verbal kintax. Some of the referential practices we observe in Murrinh-Patha interaction have analogues in talk conducted in languages with much simpler pronoun systems, and in cultures that lack ritualized name avoidance. For example, Kitzinger (2005) notes that once speakers of British and American English have invoked the societal norm of men being married to women, as Leslie does in line 3 of the fragment in 30, ‘we have friends in Bristol’, then singular pronouns like *he* (in lines 7 and 13) can be understood as being used for reference to one member of the invoked couple, in this case the husband, who is not mentioned by name.18

(30) Kitzinger 2005:249

1 Les .hh (.) Uhm (0.3) .tch Well I don’t know hgw that went,
2 .h uh (.) It’s just that I wondered if he hasn’t (0.3)
3 → uh we have friends in Bristol
4 Mar Ye:s?
5 Les who: - (.) uh: that u- had the same experience.
6 Mar Oh↑↓↑↓:
7 Les → And they uhm: .t (0.2) .hh He worked f’r a printing an:
8 paper (0.9) uh firm [u-
9 Mar [Ye:s,
10 Les uh’↓↓↓ which ih puh- uh: part’v the Paige Group.
11 Mar [Yeh,
12 (.)
13 Les → .hh And the he now has: u- a: um (1.1) I don’t think you’d
14 call it a consultancy (0.2) They find positions for people:
15 in the printing’n paper industry,"

Murrinh-Patha speakers regularly make initial reference to married couples followed by singular reference to one of the spouses, especially when circumspection constrains

18 Ignoring case distinctions, English pronouns carve the social universe into a mere six distinctions (*I, we, you, he, she, they*) (cf. Murrinh-Patha’s twenty-five distinctions for free pronouns and indirect objects, and twenty-three distinctions for direct objects and verbal subjects).
against one of the spouses’ names. In Murrinh-Patha conversation, initial references to spousal couples are normally made using DU.F.NSIB reference forms (X-\textit{ngintha}), and quite often with DU.F.NSIB free pronouns. (Marriage between classificatory siblings is strictly prohibited.) First-person exclusive dual feminine nonsibling (\textit{ngan’gungintha}) and second-person dual feminine nonsibling (\textit{nan’gungintha}) specify one member of the unnamed pair (current speaker and addressee, respectively). The unspecified other must be inferred. There is a special connotation relating to initial DU.F.NSIB references that when there are no probable candidates from the recently prior discourse, then the unspecified other can be interpreted as the speaker’s or addressee’s spouse. This process is demonstrated in the fragment in 31.

(31) Longbum Dinner (20040912JB04_82373)

1 Edna \textit{Ngan’gungintha} (kal) \textit{ngunungam} \textit{ngintha} -\textit{rdurr}  
\textit{ngan’gungintha} ?? \textit{ngunungam} -\textit{ngintha} -\textit{rdurr}  
\textit{1DU.EXCL.F.NSIB} ?? \textit{1SG.SB.7GO.NFUT-DU.F.NSIB-depart}  
‘We two (he and I) set off.’

2 \textit{thunggu} \textit{bannurduri}’\textit{tharra:thu} \textit{thunggu} \textit{ngalla} \textit{nyiniyu}°  
\textit{thunggu} \textit{ban} -\textit{nu} -\textit{rdurdi} -\textit{tharra} -\textit{gathu}  
\textit{nc:fire} \textit{3SG.SB.17.NFUT-RR -insert -moving -hither}  
\textit{thunggu} \textit{ngalla} \textit{nyini} =\textit{yu}  
\textit{rifle} big \textit{ANAPH=DM}  
‘He/she (he) put [bullets] into that big rifle as he came along this way.’

At line 1 of 31, Edna makes an initial reference to herself and her late husband using the free-pronoun-plus-verb combination \textit{ngan’gungintha} \textit{ngunungam} \textit{ngintha}. She then rerefers to her husband at line 2 with the third singular verb \textit{bannurduri}’\textit{tharra-gathu} ‘he/she was inserting something while moving hither’. Because he is not mentioned again in the discussion, it is not obvious whether Edna’s interlocutors are able to identify the referent. In the next fragment, however, it is quite evident that the interlocutors are able to do this.

In the fragment in 32, a group of senior Murrinh-Patha men and women are attempting to chronologically anchor the inception of the Wurltjirri ceremonial genre with respect to certain events, namely the oldest woman Mona’s first marriage and the subsequent establishment of the ‘old mission’ (1935).

(32) Wurltjirri (20050715JB04b_690296)

1 Mona \textit{Ngayka} married girl; \textit{ww-}  
\textit{ngay} -\textit{ka} married girl  
\textit{1SG -TOP married girl}  
‘I [was] a married woman.’

2 (0.5)

3 (click)

4 Lily \textit{i: dj} \textit{wa} [\textit{murrinyyu. }]  
\textit{ii} \textit{dji} -\textit{wa} \textit{murriny} =\textit{yu}  
yeah that -\textit{EMPH speech} =\textit{DM}  
‘Yeah, that’s right.’

5 Edna \textit{[djiwa kardu] kardinginthadhayu=}  
\textit{dji} -\textit{wa} \textit{kardu} \textit{kardi} -\textit{ngintha} -\textit{dha} =\textit{yu}  
that -\textit{EMPH NC: HUM 3SG.SB.4BE.PIMP -DU.F.NSIB-PIMP=DM}  
‘That’s right, the two of them were alive.’
6 Fred =He >ngarra< *he *↓he wulmitjinwa (,) mangga- manangga
Ha ngarra ha ha wulmitjin -wa mangga -manangga
laugh LOC laugh laugh old.mission -EMPH STRI -NEG
‘(Ha) At the old mission (ha ha) [she] wasn’t …’
7 married woman >dangatha mama< ngayyu. =
married woman dangatha mama =ngay =yu
married woman TEMP mother =1SG.POSS =DM
‘married yet, my mother.’
8 Marg =↑Hu ↓hae=
9 Fred =na mama, wulmitjin, makardu >da°ng°atha ↓nga°dh°aya;<
na mama wulmitjin ma -kardu dangatha -ngadha =ya
TAG mother old.mission NEG -NC:HUM TEMP -yet =DM
‘Were you mum, [at] the old mission, [you didn’t] yet have a
husband.’
10 (1.3)
ngay kardu bere
1SG NC: HUM completion
ngurrini -ngintha -dha -warda
1SG SB 6GO.PIMP -D.U.F.NSIB -PIMP -TEMP
‘I was already hitched.’ (lit. ‘He and I were already going to-
gether.’)
12 Edna [ x x x x x ]
13 Edna =bere wul↑mitjinyida, (1.7)
bere wulmitjin -yida
finish old.mission ??
‘(finished at?) the old mission,’
14 Edna [xxxx.
15 Rosa >mindilbitj ngangganimin< karrir yam- wuld mitjin
>wangu<,
mindilbitj ngangga -nimin karrir yam-
cemetery there -INTS 3SG SB 3stand.EXIST STRI
wulmitjin wangu
old.mission way
‘He’s [buried] right there in the cemetery, at the old mission.’
16 (0.3)
17 Fred piyelam yalngayya.
piyelam yile =ngay =ya
man’s.name father =1SG.POSS =DM
‘Piyelam was my father.’
18 Rosa Yu:::
yu
yeah
‘Yeah.’

At line 1 Mona announces that when Wurltjirri started, she was already a married
woman, which is confirmed by Lily at line 4. At line 5 Edna also confirms this (djiwa
‘that’s right’), adding that the two of them were alive at the time. The reference to Mona
and her husband is constructed using the third-person dual feminine nonsibling ‘be’
verb *kardinginthadha* (‘two nonsiblings at least one of whom was female were’) plus the ‘human’ classifier *kardu*, which only pertains to living Aboriginal people. Laughing, Fred calls this claim into question by asserting at lines 6 and 7 that Mona, whom he refers to as his mother, did not then have a husband. Then addressing Mona, by prefacing the restated assertion with the indefinite particle *na*, he calls for Mona’s confirmation of his version of the events. Mona disconfirms this assertion at line 11 by stating that she and her husband were already ‘hitched’ at the time.19 The reference to herself and her late husband is done exclusively with the ‘go’ verb *ngurringinthadha*, ‘At the time, I [who am female] and someone else who was not my sibling were going [along together]’. Rosa goes on (line 15) to specify exactly to whom Mona had been hitched by stating that ‘he’ (a man called Piyelam) is (currently) ‘standing’ (i.e. buried) at the old mission cemetery at Werntek Nganayi.20 The turn disambiguates Mona’s prior reference by specifying Mona’s dual feminine nonsibling reference as not to be interpreted as a reference to her second husband (Piyelam’s brother), who was buried much later at the cemetery in Wadeye (see Figure 3). A naming restriction underlies Rosa’s convoluted reference. This man Piyelam had the same name as her classificatory brother—a person whose name she ought not produce. Acknowledging the error of his prior assertion, Fred provides the avoided name *Piyelam* (line 17), adding that he used to call the man in question ‘father’ (which accords with him previously addressing the man’s wife Mona as ‘mother’). Rosa confirms the identification of the correct husband at line 18 (yu ‘yeah’).

![Figure 3. Mona avoids naming her deceased husband and Rosa avoids naming the namesake of her brother.](image-url)

In this fragment Mona has avoided naming her deceased husband, and Rosa has avoided using the name of her opposite-sex sibling. Their respective turns satisfy the preference for circumspection. That Mona’s avoidance of her husband’s name yielded

19 The dispreferred nature of the disconfirmation is revealed in the 1.3 second delay at line 10.
20 The reference to Piyelam is constructed with the third singular existential ‘stand’ verb *karrim*, literally: ‘he/she is there standing’ (in the cemetery at the old mission). The class 3 ‘stand’ verb has an additional sense ‘be located’.
recognitional referencing coconstructed by several speakers, spread over several turns at talk, suggests that this circumspection has come at some cost to the progressivity of the talk (effectively, calling for a relaxation of minimization). Nevertheless, the entire party’s recognition of the referent was secured with reference forms that (having very general denotation) are far from optimal as recognitions.

Readers are reminded that the point of the discussion was not to talk about people who are deceased, but to temporally locate an event. That the Werntek Nganayi mission was abandoned in 1939 locates the inception of the Wurltjirri repertory as prior to Piyelam’s demise, which evidently was between 1935 and 1939. An unintended consequence of this need to determine when certain events transpired resulted in some sophisticated use of verbal cross-reference so that a restricted name could be avoided.

The strategy of making a married-couple reference first and a third singular reference second has a third-person counterpart in what has been referred to as the inclusory construction (Singer 2001), whereby one member of a pair or group is overtly specified (often by name) and the other(s) (expressed pronominally) must be inferred. When DU.F.NSIB frames the domain of an inclusory construction, provided there are no recently mentioned potential candidates, the normal interpretation is that the unspecified other will be the spouse. In the fragment in 33 a group of singers is discussing the text of a song in which a man asks his wife a question.

(33) Ninbingi (20050715JB01a_128141)
1 Lily pinggarlmarde;
   pinggarl -ma -rde
   knee -com -foe?
   ‘It was Pinggarlma ((nickname: knees-having)) ((asking the question)).’
2 (0.4)
3 Edna (h)a(h)wu.
   awu
   no
   ‘N(h)o!!’ ((very breathy, like a growl))
4 (0.45)
5 Fred Yeah.
6 Lily (w)[ayini-]
7 Edna [kandilmunya kandilmun- (0.2) denenginthanumardadharrpudha;=
   kandilmun =ya kandilmun
   woman’s.name =DM woman’s.name
   dene -nginth -marda -dharrpu -dha
   3SG.SB.21RR.PIMP -DU.F.NSIB -abdomen -ask -PIMP
   ‘Kandilmun Kandilmun and someone else [her husband] were asking each other … ‘
8 da kurlurlurlurl pangu[yu.]
   da kurlurlurlurl pangu =yu
   NC:PLT place.name DIST =DM
   … at Kurlurlurlurl’
   dani -dharrpu -dha -wa =dini =ya
   3SG.SB.19Poke.PIMP-ask =PIMP-EMPH=3SG.SB.1sit.PIMP=DM
   ‘He/she was asking.’
At line 1, Lily makes the claim that the man asking the question had the nickname Pinggarlma ‘bad knees’. At line 3 Edna produces a very gravelly emphatic disagreement token, (h)A(h)wu ‘N(h)o!!’. In a turn spanning lines 6 and 7, Edna refers to the couple, in the song, that had this particular exchange. She does so with an inclusory construction kandilmunya kandilmun- denenginthamardadharrpudha. The reference literally means ‘Kandilmun (a woman’s name) and one other person who may or may not be female but was not her sibling were asking each other’. Because this is the first overt reference to this couple, the unspecified other is understood to be Kandilmun’s husband. In line 11, she goes on to make singular reference to the husband with a free pronoun nuku, as in nukuwathum amngexxx ‘It was him who said it to her’.

At line 12, Lily backs down from her initial claim—demonstrating that she understands the reference. Kandilmun’s husband happens to be a classificatory brother of Edna. Here Edna avoids his name by spreading her reference to him over two turns at talk—the first part as dual feminine nonsibling and the latter as singular. In this way minimization is relaxed in favor of circumspection.

The next fragment (in 34) shows just how powerful a tool kintactic verbal cross-reference is for handling name-avoidance issues. In this fragment a teller uses only free pronouns and verbal cross-reference to uniquely specify four individuals, two of whom are deceased. To the outsider the referencing seems extremely oblique as it draws on culturally specific knowledge of kinship and kin-related behavior. Although a recipient has certain difficulties remembering the event being recounted, the referencing is successful in that the four key individuals are recognizable.

(34) On the flat (20060701JB02a_128141)

1 Edna Ne↑ki^ngi^o^o[m[tjin tharrkatngime trak kayyu.
nekingime tjim -dharra
1PAUC.INCL.F.NSIB 1NSG.INCL.SB.1sit.NFUT -get.stuck
-ngime trak kanyi=yu
-PAUC.F.NSIB vehicle PROX =DM
‘This is where we got bogged in a car.’

2 Dora [Ah ]

3

4 Mary .h^o^o(nganakaya)^o^o.h
nganaka=ya maybe =DM
‘(Maybe) ((ingressed))’

5

6 Edna >nan’gunginthathinginthadhha.<
nan’gunginthathingi -ngintha -dha
2DU.F.NSIB 2SG/DU.SB.1sit.PIMP -DU.F.NSIB -PIMP
‘You and one other person were here.’
Mary Ngarrangu. ngarra -wangu what/where -direction ‘Which way?’

Edna kanyethu kura pandje dh arra. kanyi-gathu kura pandje -dha PROX -hither NC:water 3DU/PAUC.SB.22 bring/take. PIMP-PIMP -dharra -moving ‘The two siblings were bringing something of the water class this way.’

Mary ngarran°u w°a:ngu mayern ngarran°u w°a:ngu. ngarra -nu wangu mayern ngarra -nu wangu what/where -DAT direction track what/where -DAT direction ‘Which way? Which track?’

Edna °kanyungukanyungudingalngu;° kanyi-wangu kanyi-wangu dingalngu PROX -direction PROX -direction place.name ‘This way, this way Dingalngu’

Edna °Aabemathanukunudamathakandjingarrudhangime.↓° Aa bematha nukunu damatha kandji -ngarru -dha -gathu -ngime REL 1NSG.INCL.4be.PIMP -PIMP -tooward -PAUC.F.NSIB ‘toward where we were camping.’

Ah that’s all 3SG INTS kandji -ngarru -dha -ngime 3SG.22 bring/take. PIMP-1DAUC.IO -PIMP-PAUC.F.NSIB ‘Ah well he was the one bringing it for us.’

Having noticed where they were sitting, Edna reminds Mary about an event that transpired nearby, many years previously. So doing, she announces in line 1, seemingly to Mary who is seated just next to her, that this was the place where a group of people were in a vehicle that got bogged. Both the free pronoun nekingime and the verb tjinhar- katngime are used for an initial reference to the persons in the car that became bogged. The reference (1PAUC.INCL.F.NSIB) is to several people, at least one of whom was female and whose number includes the addressee (probably Mary). Because both the addressee and the speaker are female, the others might have been males or females; we cannot tell (see Figure 4).

In line 4, Mary mumbles something that is difficult to discern (possibly the indefinite nganakaya ‘maybe’). By passing up the opportunity to take an extended turn, she effectively relinquishes the floor. In line 6, Edna goes on by asserting that Mary and one other person were there: Nan’gungintha tjiniginthadha. This free pronoun plus verbal cross-reference (2DU.F.NSIB) is ‘you two nonsiblings, at least one of whom is female’.
Because Mary is female, and formerly married, and because there were no particularly salient referents from the prior talk, the implication is that Mary was there with her late husband Ken (see Figure 5).

**Figure 4.** A diagram showing the likely configuration of persons that were bogged in the vehicle (line 1).

**Figure 5.** You two nonsiblings (you and your husband) were there (line 6).
If Mary were to have doubts about the identity of the other person, presumably the subsequent turn would reveal them. In line 8, Mary requests clarification as to where the car had gotten bogged, suggesting that she has difficulty remembering the occasion (rather than with identifying the referent). In line 10, Edna grants this request with the deictic kanyethu ‘in this direction’. She does this in a way that also advances the story: kanyethu kura pandjedhadharra ‘the two siblings were bringing something of the water class in this direction’. If Mary were unable to work out who Edna is referring to, then presumably the next turn might reveal a problem. The 1.5 second silence (line 11) suggests a possible problem. In line 12, Mary seeks further clarification as to where the car had been heading, which suggests that if Mary has a problem, it lies in recalling the event, rather than understanding who the siblings are (or what they were bringing). The clarification is provided in lines 14 and 16, ‘This way, this way Dingalngu—toward where we were camping’.

To put it in Schegloff and Sacks’s (1973:299) terms, the issue for recipients of such referencing is ‘Why that now?’. The reference to the siblings is not treated as problematic, so from what was produced, how can Mary identify them? The reference in line 1 is to a ‘car-load of people’, which is understood to include both the speaker and addressee. Because the reference in line 6 (2DU.F.NSiB) to Mary and her husband Ken specifies two people in the car, the line elaborates on the reference at line 1. Line 10 also elaborates on line 1 because it specifies two people in the car as being siblings. Because ‘sibling’ references are unmarked for gender, the siblings might have been either a pair of sisters or a pair of brothers.21

Realizing that ‘something of the water class’ (expressed with the bare water-class nominal classifier kura) is a veiled reference to beer, kura thurrulk, provides a clue as to the identity of the siblings. It can be inferred that these siblings liked to drink beer. The question ‘Why that now?’ makes relevant an inspection of line 10 as a possible elaboration on line 6. That is, might Mary’s husband, Ken, be one of the two siblings? (as in Figure 6). If so, then Mary need only identify a person in a sibling relation to her husband Ken, who is likely to drink beer with him.

If there is such a person, why not just mention his name? Ken is deceased. Might the other ‘sibling’ also be deceased? One of Edna’s own sons (Greg) passed away. He was a good friend of Ken’s, and they liked to have a beer together. The two men both had a common ancestor who happened to be their respective mothers’ fathers’ father. By same-sex sibling merger (Scheffler 1978:115), the mothers’ fathers can be equated, and the mothers can be equated (as in Figure 7), thus making them classificatory brothers. Finally, Edna makes singular reference to her son at line 18, stating that he had been bringing out the beer for them. Neither man is mentioned further. The story has run its course.

By contrasting various pronominal domains, Edna has been able to specify four individuals: herself, her son, Mary, and her husband—two of whom could not be named. And Mary, it seems, was able to identify them. Edna has done this individuation without naming anyone and without even calling on the nominal lexicon. It is here, where we see dual and paucal referencing taking on the task of individuation, that we see the pragmatic power of this kin-based morphosyntax, here mobilized for name avoidance.

We observed earlier that once Anglo-American interlocutors invoke coupledom, singular pronouns were used for reference to one member of the married pair. Yet with a

21 In theory, it could also have been a brother-and-sister pair. However, opposite-sex sibling avoidance renders this combination much less likely than a pair of same-sex siblings, especially since same-sex siblings tend to socialize together. My growing corpus of natural Murrinh-Patha conversation contains no verbal or pronominal references to pairs of opposite-sex siblings, and many references to pairs of same-sex siblings.
mere six-way contrast English pronouns are perhaps limited in what else they can be used for. By maximizing the number of referential distinctions in their pronoun paradigms, Murrinh-Patha speakers have gained more options for setting up contrasts between different groups of people. The more ways there are to contrast groups, the more options there are for referring to them pronominally. As a result of this, more sophisticated tasks can be achieved by doing group reference (such as name avoidance and individuation). The ‘siblinghood’ contrast has greatly increased the pragmatic potential of
their pronoun paradigms, allowing some of the burden you might expect to be borne by
the nominal lexicon to be handled verbally.

In the fragment in 34 we observe very efficient use of kin-based morphosyntax in that
two names were avoided and four persons were specified. Recognition has been satisfied
because Mary (she assured me) recognized the individuals in question. Clearly, cir-
cumsp direction has also been satisfied, and little relaxation of minimization was needed to
bring it off. In this respect, the kin-based morphosyntax is superbly adapted to handle
not only the constraints on reference that name avoidance demands, but also recognition
(particularly when culturally specific spousal connotations relating to initial DU.F.N.SIB
references delimit the possible interpretations of these otherwise semantically general
reference forms).

So we know something of the structuration process that yielded expanded pronomi-
nal paradigms, and something of the pragmatic power that speakers are able to derive
from these paradigms, but can we be confident that the preferences we observe to be in
operation today are the same as those that drove the structuration process from the out-
set? And how should we understand the linkage between the macrolevel structuration
and the microlevel interactional practices?

5. Linking micro- and macrocausation. Like so many outback roads, the 180 km
stretch of gravel that takes you from Daly River to Wadeye seems to magically grow
corrugations almost as soon as the grader scrapes the surface smooth. As well as be-
coming heaped up at evenly spaced intervals, these corrugations begin to form rippling
lines that run perpendicular to the direction of travel—the so-called ‘washboard’ effect.
The structures appear as a result of many wheels passing at roughly similar speeds
along a surface that is physically unstable (Bitbol et al. 2009, Taberlet et al. 2007).
These growing corrugations, the traffic jams that appear out of nowhere, and the paths
that appear on lawns between university buildings are, by Keller’s (1994) reckoning,
neither exclusively natural phenomena nor exclusively artificial phenomena. Instead
they are objects of a third kind that are partly natural and partly artificial. These phe-
nomena emerge as unintended causal consequences of similarly executed actions by
multiple individuals. These similarly executed individual actions will be motivated by
roughly equivalent pressures (to minimize traveling time without losing traction on the
gravel, to avoid colliding with the vehicle ahead, to not be late for the next lecture, etc.).
These roughly equivalent pressures yield similar traveling speeds along the corruga-
tions, cautious evasive braking, and the taking of shortcuts across lawns. The emergent
structures can be explained by invisible-hand processes that straddle the microdomain
of individual intentional actions and the macrodomain of causal outcomes, by ensuring
that the multitude of individual actions proceed along roughly similar lines.

Keller argues that language is also an object of the third kind, and that language
change proceeds in a similar fashion. Linguistic structures emerge in the multiplicity of
similar individual verbal actions being produced for reasons that do not bear an obvious
relationship to the resultant forms. I argue that referring to persons is an activity that is
vulnerable to shaping by invisible-hand processes. The preference organization relating
to person reference operates on word selection and turn design. These preferences
amount to guiding principles that assist speakers in selecting the optimal reference
forms for the given occasion of reference. If individual speakers recurrently choose par-
ticular classes of reference forms because they are engaged in approximately similar
sorts of activities, then the forms they choose will be vulnerable to invisible-hand ef-
facts. We can observe these invisible-hand processes (or snapshots thereof) in operation

Preference organization driving structuration 911
in conversation, when interlocutors do recognitional reference while observing name-avoidance protocols. But in what sense can circumspection and the other preferences be said to be guiding the development of kintax? Recall the framing of the preferences, repeated here from above.

(35) a. Minimization: If possible, use single (or minimal) reference forms, as opposed to multiple (or excessively lengthy) reference forms.
   b. Recognition: If possible, use recognitional reference forms—forms that invite targeted recipients to identify the person being referred to from among the universe of people that they know (about) and that they suspect their interlocutor expects them to know (about).
   c. Circumspection: If possible, observe culturally specific and/or situationally specific constraints on reference and avoid the default reference forms.

Note that circumspection is framed in terms of NOT using the default reference forms in the event of taboos, which for introducing new referents (in Murrinh-Patha conversation) are personal names. Circumspection says nothing about what should be chosen if taboos do apply, but merely what forms should not be chosen. So circumspection does not prescribe the use of kintax (or anything in particular), but it does bias their selection by removing the optimal class of recognitionals from the range of available options. As such, circumspection can be thought of as the (not altogether) invisible hand that steers speakers away from using restricted names.

Recognition says nothing about what sort of reference forms should be used for achieving recognition, but merely that they should be used in a way that invites your interlocutor to recognize whom you are talking about. Similarly, minimization does NOT suggest how you should minimize the expressive means, but merely that if you can, you should. None of these preferences operate so as to actively select for particular sorts of reference forms. They are biasing operators. It is in the interaction of these biases that word selection takes place. Recognition and minimization each bias the selection of personal names—the former because they are effective as recognitionals and the latter because such forms are generally succinct.

There are at least three other conversational preferences that guide speakers in choosing the most appropriate forms for the given occasion of reference, defined in 36.

(36) a. Association: If possible, associate the referent to the present conversation’s participants.
   b. Generalization: If possible, prefer general reference forms and do not be overly specific about whom you are referring to.
   c. Specification: If possible, prefer specific reference forms that maximize the potential for achieving recognition.22

These preferences are locked in a sort of multidimensional tug-of-war, guiding speakers away from certain classes of reference items and in the general direction of others (see Figure 8).

22 On the preference for association, see Blythe 2010b, Brown 2007, and Stivers et al. 2007. Taking a splitter’s approach rather than a lumpers approach, Blythe 2009a derives the opposed preferences generalization and specification from Levinson’s (2007) economy and recognition, respectively. Normally, specification (‘Prefer specific reference forms’) is consistent with the above construal of recognition (‘Prefer recognitionals’), though not always. As shown in §4, pronouns can also be used as recognitionals, despite their quite general denotation.
Preference organization can also drive nonlinguistic structuration. The traffic jams that appear from nowhere (motorway shockwaves) and the corrugations appearing on gravel roads are seemingly both driven by the same two conflicting preferences relating to driving behavior.

(37) a. **Urgency**: Preferably, make haste and do not waste time.
   b. **Caution**: Preferably, slow down and look out for hazards.

Drivers are guided by these conflicting preferences in how they manage the risks associated with traveling on motorways and traveling on bush roads. Although the preferences are the same, the invisible-hand processes are not. The stability of the road surfaces differ considerably, as do the volumes of traffic. As a result, different structures emerge.

Preference organization provides a framework within which interlocutors can manage their behavior, as best they see fit. Conversational preferences are guiding principles for proper social comportment, not ruling dictates. They do not remove the chance of individual agency. They do not guarantee success in reference. They do not preclude social gaffes. They do provide for strategic positioning within social settings. By privileging particular preferences over others, interlocutors can produce the reference forms (as part of their conversational turns) that seem most socially appropriate for the given occasion of reference, or that should yield the best fit for their particular interactional projects.

We saw that Murrinh-Patha speakers are able to select kin-based morphosyntax for doing name avoidance. This morphology is seemingly well tailored for the task. Because speakers regularly engage in name avoidance and because name avoidance can be done pronominally, by a process of elimination the bias against names swings the balance toward pronominal reference (but also toward kinterms, nicknames, etc.). By deriving advantage from more contrastive distinctions, pre-Murrinh-Patha speakers began using verbal cross-reference in ways that ultimately sent the language down a grammaticalization pathway. I am not suggesting that Murrinh-Patha speakers deliberately selected the third singular ethical datives because of the need to avoid personal names. But given that there was a pair of available gender-marking morphemes that were already fillers of the relevant slots in the verbal template, Murrinh-Patha speakers began to derive referential advantage from using this gender-marking capacity, so that ultimately the ethical datives...
were reanalyzed as nonsibling-gender-number markers. We now have some insight into the kinds of operationalized advantage this might have afforded.

The preference-driven grammaticalization hypothesis is supported by the data presented above, but we should also look for supporting evidence from other languages. Unfortunately, the typological comparison of interactional language-usage systems has barely commenced. Nevertheless, crosslinguistic research on person reference does come out in support of minimization and recognition in a variety of unrelated languages and diverse cultures (Brown 2007, Garde 2008, Hacohen & Schegloff 2006, Haviland 2007, Levinson 2007, Sidnell 2007, Stivers et al. 2007). Further work is needed to show whether other preferences such as circuminspection have any sort of universal applicability.

There need not be a requirement that the existence of roughly equivalent conversational pressures would have driven the same sorts of grammaticalization phenomena across the continent. Culturally specific differences in the types of kin to be avoided and in the actual avoidance strategies, and differences in the hierarchical ranking of preferences, might all have played parts in providing for the variety of attested phenomena (just as differences in surface stability and traffic volume have different impacts on roads). The main provisos would be that analogous avoidance strategies become routinized in conversation and that there be some grammatical or lexical item available for reanalysis as a result of these routinized referential processes.

Simpson (2002:290–91) cautions against assuming the cultural preoccupations that currently apply are the same as those that might have driven change in a previous era. However, given the pan-continental status of both name avoidance and classificatory kinship in Australia, and given that they are also present in New Guinea, which until only 10,000 years ago was joined to Australia in a single landmass, it is unlikely that classificatory kinship and name taboos are recent developments.

Furthermore, if the social conditions driving the structuration of Australian kintax were to no longer apply, we might expect the utility of such structures to diminish, and the structures might fall into disuse. Kintax works well enough in small societies where community-wide genealogical information can be retained within the head of an individual speaker. How this pans out in the future as regional populations grow and social networks begin to expand, and as Australia’s traditional languages become increasingly endangered, remains to be seen. For the moment, however, kintax is still emerging on the Australian continent, despite the shift away from traditional languages. In the creole of Eastern Arnhem Land, Merlan and Heath (1982:107–8) report a kin-dyadic suffix -giija (which they suggest derives from together) that is attached to modern kinterms of the English-lexifier base. Koch (1982:69) reports a similar dyad -gether in Central Australian Aboriginal English. Certainly in these areas both classificatory kinship and name avoidance are still important features of day-to-day life.

Clearly this case study barely scratches the surface of the puzzle. There are only a few diachronic explanations for kin-based morphosyntax. There are few detailed studies of face-to-face conversation conducted in Australian languages and even fewer that attend to the conversational pragmatics of kinship terminology. There are still, however, a number of languages exhibiting kintactic phenomena that are vital enough to conduct

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23 Furthermore, Kriol preserves the inclusive/exclusive distinction and the three-way number distinction common in many traditional Aboriginal languages, thus yielding an eleven-way contrast (cf. the six-way contrast in Standard Australian English pronouns). This is consistent with the thesis being presented here that more contrastive distinctions are interactionally useful when name avoidance is an issue.
interactional analyses. Until these analyses can be done, how can we really understand what speakers use their morphology for doing? Australian languages have gone all-out to evolve kin-based phenomena. What are they good for? What sort of activities do speakers engage in when they call on these phenomena? As I hope to have demonstrated, the approach adopted here can shed light on how and why they might have emerged.

But what of this methodology? What is new here is not so much the techniques, but rather their adoption in combination. It hinges on the blind-men-and-elephant-like realization that the enchronic timescale (Enfield 2011, 2013a) in which social interaction operates and the diachronic timescale in which grammaticalization takes place each provide different windows on the same process of change. The invisible-hand explanation offers a linkage between the microsocial and macrostructural causal explanations. The linkage does not get us from the former to the latter (or vice versa) because it does not need to. It is a bridge that spans the different causal domains. Because interactional and historical methods provide viewpoints that differ in granularity, the explanatory details differ in type, but in ways that are consistent with each other. Together they conspire in providing a more complete picture of evolution in progress.

APPENDIX: ABBREVIATIONS AND SYMBOLS USED IN THIS ARTICLE


Kinterm abbreviations: Br: brother/brother’s, Ch: child, Da: daughter/daughter’s, e: elder [kin], Fa: father/father’s, Hu: husband/husband’s, m: man’s [kin], Mo: mother/mother’s, So: son/son’s, w: woman’s [kin], Wi: wife/wife’s, y: younger [kin], Zi: sister/sister’s. For example: mZiDaCh = man’s sister’s daughter’s child, eBrDa = elder brother’s daughter.

Symbols relating to the transcription of speech, used in the conversational fragment examples in §4.

[ ] Overlapping speech.
(0.9) Silence (i.e. 0.9 seconds).
( ) 0.1 seconds of silence.
- An abrupt cut off, usually a glottal stop.
= Latching (no gap or overlap between different speakers).
= Where the ‘=’ sign occurs mid-line, this indicates the immediate continuation of the turn after a point of possible completion.
xxx xx Indiscernible speech.
(text) Difficult to discern text. Bracketing indicates either a best guess at transcription or text alleged by consultants that I believe to be dubious.
((text)) Transcriber’s comments
^text^ Utterance is softer than surrounding talk.
>text< Utterance delivered faster than surrounding speech.
<text> Utterance delivered slower than surrounding speech.
stress Stress is marked by underlining.
; Colons (without underlining or adjacent underlining) indicate lengthening or drawl.
↓, ↑ Marked shift to higher or lower pitch.
↑text↑ Entire utterance delivered at higher than normal pitch.
↓text↓ Entire utterance delivered at lower than normal pitch.
? Fully rising terminal intonation.
. Fully falling terminal intonation.
¿ Mid-high rising terminal intonation.
; Mid-low falling terminal intonation.
, Slightly rising terminal intonation.

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