Chapter 15

Reflexive and middle constructions in Chini

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In this paper, I rely primarily on examples from discourse in Chini, a language of northeastern Papua New Guinea, in order to describe how reflexivity and autopathic semantic relations are expressed. First, I describe the reflexive possessive construction. I suggest that the coreferential association is between the possessor and the most topicworthy participant(s), which often, but not always, corresponds to the clause-internal subject. I then describe the middle construction and argue that its primary function is to identify the main participant in a clause as a semantic patient. The potential for autopathic readings of clauses headed by middle verb forms depends on the degree of the participant's control over the activity and furthermore involves interplays between lexical semantics and contextual interpretation. Finally, I discuss certain specialized middle constructions where the reflexive or reciprocal interpretation is made absolute.

1 Introduction

Here I describe the possessive reflexive and the middle construction in Chini, a language of northeastern Papua New Guinea (PNG). I provide background about Chini in §1.1, and my methods in §1.2. In §2, I provide an overview of relevant areas of the grammar, especially participant roles and clause structure. I describe the workings of the reflexive possessive pronoun *ŋɨ=* in §3, and the middle marker *nji-* in §4. I conclude in §5.

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1.1 The Chini language

Chini is the traditional language of the Awakŋi people of Andamang village and
the Yav̇inaŋri of Akrukay. Both villages are associated with a distinct dialect,
each with a social as well as geographic dimension. The villages themselves correspond to multiple hamlets on the lower Sogeram River in Madang Province,
Papua New Guinea (PNG), see Figure 1.[1] Local speech practices are characterized by code-switching between Chini and Tok Pisin, the national lingua franca
of PNG and areal language of shift. Currently, young adults are mostly bilingual
listeners but do not actively use Chini. Most adults in their 40s and older (about
50 people) are active users, and some are multilingual in neighboring languages.
Dialect differences and any Tok Pisin material are maintained in examples as
they were originally said by the speaker.

Chini belongs to the Tamolan subgroup in the Ramu family (Z'graggen 1971;
Foley 2005; Brooks 2018b), a grouping of at least 20 languages along the lower and
middle Ramu River and in adjacent areas. Few descriptive materials are available
on these languages.

1.2 Methodological background

The fieldwork on which this paper is based has been conducted across multiple
trips totaling 12 months between 2012 and 2019. My fieldwork practice has ethnographic, linguistic, and documentary components. The corpus is housed at the
Endangered Languages Archive (ELAR) (see Brooks 2018a for the web address).
The annotated part of the corpus consists of some 15 hours of connected speech
in Chini, including narrative but mostly conversation. This is supplemented by
my field notes which include many key examples from unrecorded interactions.

In this paper, I describe the possessive reflexive and the middle constructions
in a way that reflects Chini grammar and usage, as limited by the extent of my
understanding. I rely mostly on examples from connected speech. These are identified by their location in my fieldnotes or by recordings in the Endangered Languages Archive. Examples labeled "Offered" were proposed by native speakers
as appropriate utterances for me to parrot. "Elicited" examples are from targeted
elicitation, either from a speaker's translation of an attested Tok Pisin utterance,
or from transcribing naturalistic speech. While all recordings have the consent
of participants to be public, any examples I feel present a concern are not accompanied by identifiers. Common everyday expressions are not cited. Translations

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[1]Pale red denotes Trans New Guinea languages, green: Ramu languages, white: uninhabited
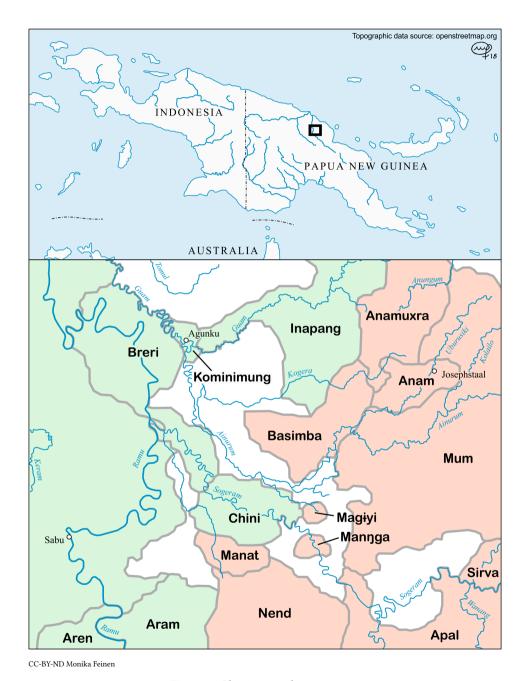territories.

Figure 1: Chini in areal perspective

aim to reflect the original Chini as much as possible without being too infelicitous in English, and those that depart significantly from the Chini are labeled as free translations. Likewise, descriptive labels and glosses are not intended rigidly or as representations of universal concepts, but as tools to represent language-specific associations between form and meaning (Reesink 2008).

2 Grammatical background

Here I provide an overview of the grammar relevant to the possessive reflexive and (especially) the middle construction, namely participant categories and how their semantic and pragmatic roles relate to clause structure and valency behavior. In §2.1, I discuss the noun phrase in Chini; in §2.2 participant categories for nominals; and in §2.3, I address pragmatically-determined constituent order in main clauses.

2.1 The noun phrase

Noun phrase structure is [noun][adjective][numeral] with mostly dependent-head order in genitive constructions. The position of deictic determiners is based on semantic scope. Nominal categories include a plural/non-plural relative number distinction (where "non-plural" is semantically akin to a paucal), diminutive, augmentative, and authentic (i.e., an original version of something). Noun phrases are not flagged for core cases. Postpositional enclitics provide semantic and/or pragmatic information about the role of the noun phrase in the clause. It is not unusual for multiple enclitics to co-occur. This allows for fairly complex ideas to be expressed in a single noun phrase, including (as it relates to reflexivity) autopathic concepts. In particular, concepts involving self-reflection tend to rely on roundabout (and often, translation-resistant) expressions, without overt reflexive material. For example, Agusta said (1)[2,3] after complaining her eyesight had become too poor to see her knitting properly.

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[2]Certain graphemic conventions diverge from a phonemically-based orthography. Between vowels or glides, ⟨g⟩ represents the velar approximant /ɰ/. ⟨ŋ⟩ represents /ŋ/, but ⟨ŋg⟩ represents the prenasalized stop /ᵑg/. ⟨g⟩ is also used for [g], an allophone of /ᵑg/ that occurs before /ŋ/. ⟨h⟩ represents the breathy voice quality of certain stops when it is phonemically contrastive (and co-occurs with ingressive airflow, which is not represented). Other instances of murmur are not represented. ⟨c⟩ occurs in ⟨cm⟩ to represent the voiceless palatal stop in the prestopped nasal /ᶜm/ and in ⟨ch⟩ for the affricate /tʃ/. Other conventions include ⟨v⟩ for /β/, ⟨ñ⟩ for /ɲ/, and ⟨nj⟩ for /ᶮɟ/.

[3]Example citations indicate the source of the original utterance. In addition to the speaker's name, an identifier like 'afi021218m_7:09' indicates the ISO code (afi), the date of the recording, the number of participants (s for 'single', m 'multiple'), and the time stamp.

(1) *ku   pavimɨŋaŋgamika!*
   ku   pa=avi=mɨŋɨ=aŋgɨ=ami=k-a=a
   1SG.NOM before=NEW=TRANS=LH.NPL=SIM=PROX-DEF=EXCL

   'Who am I now, in contrast to the bright-eyed me from before!' (Free translation) [Agusta Njveni, afi021218m_7:09]

2.2 Participant categories for pronouns and nouns

Whereas many Papuan languages are known for the reduced functional role of nominals in discourse (de Vries 2005), in Chini, the functional load of nouns and pronouns in referential tracking (among other uses) is high. The language has an abundance of core argument categories for object-like participants. These tend to be given lexical expression, especially instruments. As a result, nominal-heavy clauses are not as uncommon in Chini discourse as they might be in other Papuan languages. Another reason for this relates to the fact that clause chaining in Chini is not based on reference. Instead, the chain linkage devices code dependency relations that demarcate topical information from the comment, among other related discourse-pragmatic functions. This can be glimpsed in (2), where the prosody and the chain linker =*va* demarcate the topical background information from the following comment, which is headed by the final clause. The pragmatic unity between the two clauses in the comment is signaled by the linker =*kɨ*. In each clause, reference is clarified by pronouns.

(2) a. *ku   ŋgaŋgukŋimapava*
     ku   ŋgɨ=aŋgu.kŋi-m-apa=**va**
     1SG.NOM 3SG.DAT=ask-IPFV-R=PRE.R

     'I had been asking her (Dorin) but'

   b. *anɨ ŋɨrkŋɨ   nɨŋaviandikɨ*
     anɨ ŋɨ=ɨrk-ŋɨ   nɨ=ŋɨ=avia.ndi=**kɨ**
     3SG POSS.REFL=talk-NPL INS=1SG.ACC=withhold.R=CNT.R

     'she withheld her plans (lit. her talk) from me and'

   c. *ku   yanɨ pupmu kuavɨyi.*
     ku   yanɨ pupmu ku-avɨ-yi
     1SG.NOM just alone   cross-TLOC.PC-R

     'I went all alone to the other side of the river (to collect greens).'
     [Dorothy Paul, afi051116m_15:14]

In §2.2.1, I discuss pronouns in Chini and in §2.2.2, I discuss the language-specific ways in which allatives, benefactives, and instruments act as core participants.

2.2.1 Pronouns

The Chini pronouns can be seen in Table 1 below. The initial vowel *a* in 3SG forms is maintained only in the Akrukay dialect. The nominative and dual forms are unbound, while all others are bound proclitics.

In Chini, verbs that can be used transitively (i.e., that occur with reference to object-like participants) are associated with one (or sometimes, more than one) pronominal object case. Recall that nominals are note marked for case; however, the three pronominal cases are accusative, dative, and benefactive,[4] see Table 1.

Table 1: Pronouns in Chini

	NOM	ACC	DAT	POSS	FOC.POSS	BEN
DIST	*mɨ*	*mɨ*	*mɨ*	*mɨ*	-	*mbɨ*
1SG	*ku*	*ŋɨ*	*ŋɨ*	*ku*	-	*mbɨ*
2SG	*nu*	*nu*	*ŋgu*	*ŋgu*	*ɨnku*	*ndvu*
3SG	*anɨ*	*(a)ni*	*(a)ŋgɨ*	*(a)ŋgɨ*	*ankɨ*	*(a)ndvɨ*
1PL	*añi*	*añi*	*anji*	*anji*	*ainkɨ*	*anjvɨ*
1/2/3PL[a]	*ñi*	*ñi*	*nji*	*nji*	*iŋkɨ*	*njvɨ*
1DU	*aŋgɨ*	*aŋgɨ*	*aŋgɨ*	*aŋgɨ*	-	[b]
2DU	*ŋgu*	*ŋgu*	*ŋgu*	*ŋgu*	-	[b]
3DU	*maŋuñi*[c]	*maŋuñi*	*maŋuñi*	*maŋuñi*	-	[b]

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[a]Collective.

[b]Co-occur with BEN *vɨ=*.

[c]Lit. 'those two', sometimes: *kaŋuñi* 'these two'.

The pronouns exhibit several divisions. The 1SG *ŋɨ=* conflates accusative and dative case. 2SG, 3SG, and 1/2/3PL[5] conflate nominative and accusative while distinguishing the dative. As I discuss in §2.3, constituent order in object-initial main clauses justifies grouping accusatives and datives as 'Patients' in the sense

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[4]A handful of verbs take the benefactive, for example: *ndɨ-* 'like, think of', *anu-* 'worry about', *ayi-* 'wait for', *kɨ-* 'propel, kick, throw'. Others take the dative: *ñu-* 'chase off, after', *aŋgu-* 'request information', the sense 'hog someone's time, be possessive over (someone)' of *amru-* 'seize', *ndu-* 'perceive (PC)'. The majority take an accusative: *ki-* 'tell', *amba-* 'take care of (someone)', *amá-* 'transport, take (someone somewhere)', *ŋgin-* 'perceive (PL)'.

[5]The collective pronouns represent any 2 or more persons as a unit. The DU and 1PL distinctive pronouns represent multiple persons in terms of some property of distinctiveness. Often the difference is subtle.

of 'the most semantically patient-like argument in a multivalent clause'. As I discuss in §3, the reflexive possessive pronoun *ŋɨ=* refers to topical possessors.

2.2.2 Allatives, benefactives, and instruments as core participants

Any lexical noun (and some nominalized verb forms) having a certain semantic role of goal, beneficiary, or instrument is considered a core participant in Chini clause structure. That status is cross-referenced by a proclitic that attaches to the verb complex: allative *mɨ=*, benefactive *vɨ=*, and instrumental *nɨ=*. These language-specific categories exhibit some semantic variability, for instance nouns having the semantic role of goal or path count as allatives, as seen in (3).[6]

(3)   *ku*   *Amɨŋarɨ*   *mayikɨ*
       ku   Amɨŋarɨ   **mɨ**=ayi=kɨ
       1SG.NOM [Ramu_river]_{ALL} ALL=go/come_upriver.IRR=CNT.R

       achikɨ   *tɨŋɨ*   *mayuku*   *yu.*
       achi-kɨ   tɨ=ŋɨ   **mɨ**=ayuku   yu
       [upriver-PROX path=ADESS]_{ALL} ALL=quickly go/come.IRR
       'I'll go upriver on the Ramu (River), going quickly on the upriver route.'
       [Dorothy Paul, afi260814m_29:03]

Instruments include concrete and abstract instruments, gifts, entities manipulated by human hands, certain roles and capacities, and adverbial manner, (4).

(4)   *ka*   *ku*   *mmhɨ*   *nɨmɨnkɨ.*
       k-a   ku   mmhɨ   **nɨ**=mɨ=nkɨ
       PROX-DEF 1SG.NOM [bamboo]_{INS} INS=DIST=light.R
       'This (the matchwood) I lit using the bamboo.' [Anton Mana,
       afi271016m_12:17]

The benefactive indicates beneficiaries, maleficiaries, purposes, and reasons. As seen in (5), this participant category is the only one shared by pronouns and nominals (here, a nominalized verb).

(5)   *andvambrimbri*   *varatmapaye*
       andvɨ=ambri~mbri   **vɨ**=ara-tm-apa-y-e
       3SG.BEN=hurry~NMLZ BEN=move.along-IPFV-R-Z-CTRST

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[6]Also apparent in (3) is the possiblity for a noun phrase marked by an adessive or vialis postposition to count as an allative, a grey area in the core vs. oblique distinction.

'I was on my way in order to hurry for him but (...he had forgotten all about it).' [Emma Airɨmarɨ, afi051116m_2_15:59]

Benefactive pronouns in fact conflate Benefactive and allative functions. Pronominal recipients of directional transfers (from a source to a goal, along a path) take the benefactive form. Example (6) concerns a soccer game that had taken place.

(6) *ndvɨkavɨ!*
     ndvɨ=kɨ-avɨ
     3SG.BEN=propel-TLOC.OPT.PC
     'Kick (the ball) to him.' [2016 Fieldnotes, elicited example]

The basic point here is that Chini biases its users to attend to specific types of participants, including ones not always thought of as candidates for core arguments (see Mithun 2005). In the next section, I discuss some similarities and distinctions between Patients and instruments when they pattern as topics in clause-initial position.

2.3 Pragmatically-determined constituent order in main clauses

Main clauses are verb-final, and the order of nominal constituents is pragmatically-based. For transitive clauses with a semantic agent (A) and patient (P), APV is the most frequent order. As shown in (7), this word order is used when A is the default topic-worthy argument. In this exchange between a folkloric husband and wife, the P argument has no special pragmatic status; the participation is normative and unremarkable in relation to the activity.

(7) *ŋgɨmanɨ*   *ŋgaŋgukŋi*   *"nu ŋgu aryindani?"*
     ŋgɨ=manɨ   ŋgɨ=aŋgu-kŋi   nu ŋgu ar-yi-nda=n-i
     3SG.POSS=husband 3SG.DAT=ask-IRR 2SG fish catch-IRR-NEG=Z-Q.IRR
     'Her husband asked her: "Did you not catch any fish?"' [Frank Mana, afi260612s_1:19]

The construction that serves to activate the topicworthiness of a lexical Patient relies on clause-initial placement and a pronominal clitic cross-referenced on the verb complex.[7] In (8), Emma activates 'sago' as a topic, suggesting (in jest) to her addressee that he has been remiss in his work.

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[7]The distal deictic *mɨ*= is used mostly for non-humans. Human Patients are cross-referenced by their relevant (human) pronoun. Accusative *ŋi*= is used for the 1SG. For the 2SG, 3SG, and all PL persons, the accusative or dative is used, depending on the verb.

(8) *anjɨgɨ nu mɨñu?*
     anjɨgɨ nu **mɨ**=ñu
     sago   2SG **DIST**=carve.IRR
     'Are you ever going to (harvest) that sago?' [Emma Airɨmarɨ,
     afi250814m_3:14]

Instrument and benefactive (but not allative) participants may appear as topics (in initial position) and are cross-referenced on the verb complex just like topicworthy Patients, as seen in (9).

(9) *...ayi   pirkɨ   añi manɨmɨñi.*
     ayi   pir-kɨ   añi ma=**nɨ**=mɨ=ñi
     [something bad-NPL]_{INS} 1PL FOC=INS=DIST=get.R.PC
     '(The money, we didn't get it in a good way...) it was by something bad
     (by selling cannabis) that we got it.'

A topicalized object may pattern as both Patient and instrument. In (10), *vrinkɨ* 'reeds' occurs in clause-initial position as a topicworthy participant. It is cross-referenced on the verb as an instrument (by the first *nɨ=* in the clause, whereas the second *nɨ=* refers to the fire as a second instrument), due to the alteration of its state by human hands. As the affected participant, it is also a Patient, as indicated by *mɨ=*.

(10) *vrinkɨ nɨgwu   nɨmɨkavɨmɨ...*
     vrinkɨ **nɨ**=gwu ni=**mɨ**=kɨ-avɨ=mɨ
     reed.PL INS=fire INS=DIST=throw-TLOC.OPT.PC=PRE.IRR
     '(Set fire to it!) Set fire to the reeds (...and then the dogs will kill the pig as
     it emerges).' [Alfons Garɨmbɨni, afi160714m_8:43]

The Chini patterns evince a more complex array of possibilities for participant roles than the term 'object' implies (Mithun & Chafe 1999). At the same time, object-initial clauses do reveal a participant category of Patient.

3 The reflexive possessive construction (*ŋɨ=*)

In §3, I describe the uses of the reflexive possessive pronoun *ŋɨ=*, the only *bona fide* reflexivizer in Chini. Specifically, in §3.1, I show how the majority of utterances that employ *ŋɨ=* reflect the common analysis of reflexive relations in terms of clause-internal coreference (between possessor and syntactic subject). Then,

in §3.2, I discuss how other examples point to topics and (to a lesser extent) agents (rather than subjects) as coreferential with reflexive possessors. This can be seen in instances of partial coreference but also clause-external coreference, where the discourse topicality of the antecedent possessor supercedes the topicality of the subject in the clause where *ŋi=* appears. In §3.3, I discuss how uses of the reflexive marker can involve clause-external co-reference, between the possessor and a topic. This phenomenon shows that in Chini, co-reference is often but not rigidly clause-internal, i.e., as if exclusive to subject referents.

3.1 Clause-internal coreference between subject and possessor

In (11), the 2SG possessor is straightforwardly coreferential with the subject.

(11)   *"nu ŋimanɨ   kɨramɨ"*
      nu **ŋɨ**=manɨ   kɨ-ra=mɨ
      2SG POSS.REFL=husband tell-OPT=PRE.IRR
      '"You tell your husband (...he must come down and spear the crocodile)."'
      [Anton Mana, afi260514s_2:28]

Note that this construction is also used for reciprocal possession (English: 'each other's'), as in (12) below.

(12)   *añi mɨyi   vɨndɨ   mɨ, añi ŋɨrkŋɨ   akikina?*
      añi mɨ-yi   vɨ-ndɨ   mɨ añi **ŋɨ**=ɨrk-ŋɨ   aki~ki=n-a
      1PL DIST-what BEN-think DIST 1PL POSS.REFL=talk-NPL spear~IPFV=Z-Q.R
      'Why do we not heed/deflect (lit. spear) each other's talk?' [Dorothy Paul,
      afi260814m_34:55]

In general, when the possessor referent is not the subject (or established topic), a non-reflexive possessive pronoun is used (see Table 1). In (13), Emma uses the non-reflexive collective possessive *nji=* as she complains about a very relatable problem.

(13)   *ainkɨtwavɨŋgayi   aŋri   njirkŋɨ   ŋginimichinda.*
      ainkɨ=twavɨŋgayi   aŋ-ri   **nji**=ɨrk-ŋɨ   ŋgini-m-i-chi-nda
      1PL.FOC.POSS=child.PL man-PL PL.POSS=talk-NPL perceive-IPFV-IRR-Z-NEG
      'The young men of ours don't listen (lit. perceive/heed any of our talk).'
      [Emma Airɨmarɨ, afi260814m_34:59]

A possessor in a phrasal afterthought takes the non-reflexive form, as shown in (14). The prosodic break (here, a pause indicated by the comma) between the clause and the phrasal afterthought is enough for the latter to be treated as clause-external.

(14) *mumuŋu ŋakɨ   ɨvki,   ŋgambɨgɨ.*
     mumuŋu ŋa-kɨ   ɨvk-i   **ŋgɨ**=ambɨgɨ
     auntie riverwards-PROX be.sitting.PC-IRR 3SG.POSS=house
     'Auntie (Agusta) is sitting over there riverwards, (in) her house.' [Anton Mana, afi111016m_43:41]

Reflexive possessors need not be human, so long as the animal (15) or inanimate entity (16) is an agentive topic.

(15) *chavɨ   ŋimiatmɨ   niŋaurua.*
     chavɨ   **ŋi**=miatmɨ   ni=ŋi=auru-a
     poison.frog POSS.REFL=poison INS=1SG.ACC=wash-R
     'The poison frog shot ('washed') me (in the eye) with its poison.' [Anton Mana, 2018 Fieldnotes, offered example]

(16) *miŋatugu   michagɨyi.*
     mɨ=**ŋi**=atugu   mɨ=chagɨ-yi
     DIST=POSS.REFL=limit ALL=arrive-R.PC
     'It has reached its limit.' [Anton Mana, 2014 Fieldnotes, offered example]

Note that, as shown in (17), non-reflexive animal and inanimate possessors rely on the distal deictic *mɨ=*.

(17) *miyẽntmɨ   ara.*
     mɨ=yim-tmɨ   ar-a
     DIST=chew.betel.nut-NMLZ good-R
     'Its (the meat of the betel nut in question) chewing is good (for getting a buzz).' [Alfons Garɨmbɨni, 2014 Fieldnotes, offered example]

3.2 Partial coreference between topic (or agent) and possessor

Coreference can involve either full or partial identity of the possessor with the subject. In instances of partial coreference, the possessor almost always refers to the more topicworthy member within a plural subject. Ros addressed (18) to Anton and me as we emerged from the bush in her part of the village. The possessor

and topic is me (not me and Anton, since the recently deceased woman Ikivim is my classificatory grandmother but Anton's aunt). The reference of the possessor and its topicworthiness is then reinforced in the 3sg benefactive pronoun *ndvɨ=*.

(18)   *na   ñi   ŋɨñinmɨ   aŋgɨnɨ ndvɨmbruindani?*
       na   ñi   **ŋɨ**=ñinmɨ   aŋgɨnɨ ndvɨ=mbru-i-nda=n-i
       and PL POSS.REFL=maternal.ANC banana 3SG.BEN=cut-IRR-NEG=Z-Q.IRR
       'Did you all really not cut off any of his grandmother's bananas for him?'
       [Ros Njveni, afi111016m_44:50]

Similarly, in (19) the partial coreference is based on the topical participant within a plural subject. That participant is a (folkloric) village man, as introduced in the first clause and understood as the protagonist of the folktale. He is a subset of the plural subject (i.e., the villagers who carried the pig along with him to his homestead).

(19)   *ñi manjurakɨ   chakɨ   ŋɨŋgɨgɨ*
       ñi mɨ=anjur-a=kɨ   ch-a=kɨ   **ŋɨ**=ŋgɨgɨ
       PL DIST=carry-R=CNT.R ascend-R=CNT.R POSS.REFL=homestead
       mɨga...
       mɨ=g-a
       DIST=set.down-R
       'They (the villagers, including the man) carried it (the pig), went up, and laid it down at his homestead...' [Paul Guku, afi100514s_12:07]

In one specialized construction, the interpretation of the reference of the possessor hinges on semantic agency rather than pragmatic topicworthiness. This construction expresses accompaniment or "attendant action" (Zaliznjak & Shmelev 2007: 214).

Its function is based on asymmetries in agency within a plural subject, where one member merely attends the action and is not an agent. Of the two members of the subject in (20), the wife is expressed as the agent, since she is headed to her matrilineally inherited bush ground with her husband, who merely accompanies her.[8]

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[8]There is an underlying cultural component that drives the use of this construction. It is often used to describe movements into the bush. In Chini society, the bush is subdivided into chunks, each associated with a particular moiety and associated subclan (spouses belong to opposing moieties.) The chunks are inherited through a system of mostly matrilineal land tenure according to moiety and clan membership. So, the agent in these situations is that person whose clan owns the land. In Chini, they are referred to as *mbɨpapayaŋgɨ* 'the one who goes first to it'. Just as that person (the candidate for the topical agent in this construction) 'goes first', their spouse (or other associate) is seen as accompanying them.

(20) a. *Aŋgwamɨ pata ŋgɨmanɨ,   maŋuñi, bmu   nigɨ,*
          Aŋgwamɨ pata ŋgɨ=manɨ   maŋuñi bmu   nigɨ
          Aŋgwamɨ CONJ 3SG.POSS=husband 3DU   sundown another
          maŋuñi anjɨgɨ vuwuyi.
          maŋuñi anjɨgɨ vu=wu-yi
          3DU   sago BEN=go/come-R.PC
          'Aŋgwamɨ and her husband, those two, a day later they went to
          (harvest) sago.'

       b. *Maŋuñi ŋimaninmɨ   avkɨkɨ   anjɨgɨ*
          maŋuñi **ŋi**=manɨ=nmɨ   av-kɨ=kɨ   anjɨgɨ
          3DU   POSS.REFL=husband=ACCOM descend-R.PC=CNT.R sago
          ŋumapa.
          ŋu-m-apa
          carve-IPFV-R
          'The two of them, (she) with her husband went down (to the bush)
          and harvested sago.' [Anton Mana, afi051116s_0:51]

3.3 Clause-external coreference between topic and possessor

The above examples of full and partial coreference uphold the general view of
reflexive relations as a clause-internal matter. However, examples from Chini dis-
course reveal that reflexivity can involve clause-external coreference. Such uses
arise when the discourse topicality of an antecedent supercedes that of the sub-
ject, for instance in long stretches of discourse like clause chains where multiple
subjects are introduced. The chain in (21) is about an oxbow marsh that several
Andamang villagers share with a neighboring village called Watabu. The subject
in the third line below is elided, but it is clear from the context that it would
be the Awakŋi boys (*agŋiŋri*) fencing off the marsh. It is also clear that the dis-
course topic (and possessor) is not the boys themselves, but rather the Awakŋi
owners of their half of the marsh (Anton and his family), i.e., the 'we' from the
first clause.[9]

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[9]The boys, while potentially a subset of the 1PL argument in the first clause, are not so easily
identified as such. The marsh belongs to a specific clan. The event has also not yet occurred, and
the boys represent multiple clans. So, these two referents turn out to represent separate topics.
Comrie (1999) points out how breaks in topic continuity often motivate the use of more marked
pronominal forms to reactivate the discontinuous topic. However, Chini does not distinguish
pronouns in this way.

(21) a. *añi ŋɨyãrkŋɨ   ndumɨ,*
            añi ŋɨ=yãrkŋɨ   ndu=mɨ
            1PL POSS.REFL=side.of.things perceive.PC.MOD=PRE.IRR
            'We need to attend to our side of things so,'

    b. *agŋiŋri   rindata   vienɨ*
            agŋi-ŋri   ri=nda-ta   vienɨ
            post.initiate.boy-PL head.downriver.MOD=SEQ-IRR sago.palm.frond
            agarɨndata,
            ag-arɨ=nda-ta
            cut-MOD=SEQ-IRR
            'once the (older) boys have gone downriver and cut dried sago palm fronds and,'

    c. *ŋaŋgɨ   tɨrɨmɨ...*
            ŋɨ=aŋgɨ   ti-rɨ=mɨ
            POSS.REFL=LH.NPL cut.PC-MOD=PRE.IRR
            'fenced off (lit. cut) ours (side of the marsh)...' [Anton Mana, afi260814m_1:57]

For the possessive reflexive construction, coreference most often involves full identity between the possessor and the topical subject. Partial coreference and the possibility for clause-external coreference with a topical antecedent reveal that possessive reflexivity may be more complex than clause-internal relations between syntactic categories. Where clause-external coreference is concerned, some explanation may be found in the potential for newly introduced subject participants to be ephemeral in discourse vs. topics which are established as given and definite, and thus more highly recoverable from context (Lambrecht 1994). In other words, highly topical participants enjoy high candidacy for coreference as reflexive possessors, and may in that capacity override subjects (cf. Reesink 1983).

4 The middle construction (*nji*)

Here I describe the workings of the Chini middle, formed by the verbal prefix *nji-* (or the proclitic *nji=* in a few specialized constructions discussed in §4.2.2). There are no reflexive pronouns beyond the possessive *ŋɨ*; therefore, the middle construction is the primary grammatical expression for autopathic and mutual relations. The function of the middle is to represent the action of the verb events as affecting (rather than being fully controlled by) the main participant. That

is, the main participant in a middle-marked clause is essentially a semantic patient.[10] My main focus here will be to illustrate how this function interrelates with autopathic and mutual semantic readings. I argue that those readings are strongest when the main participant has significant control over the action, and much weaker when they are perceived to have less control.[11]

The current documentation records 70 middle verb forms in Chini, which corresponds to approximately 20% of the verbal lexicon (where middles are considered separate lexemes, either as deponents or as derivations of non-middle counterparts). Historically, the Chini middle appears to predate the diversification of the Tamolan subgroup. This is hinted at by cognate middle forms and their unmarked transitive counterparts for 'bathe' and 'wash' in Chini's nearest relatives (Z'graggen 1974). The historical relation to the plural collective dative pronoun of the same form, *nji=* (see Table 1), is unclear, but the two are almost certainly related. In what follows, I give a brief overview of the transitivity patterns of middles §4.1. In §4.2, I discuss the semantics of middles in terms of how the presence, absence, or mitigated control yields differences with respect to autopathic (and/or mutual) interpretations.

4.1 Transitivity patterns and argument structural behavior of middles

Middles exhibit a range of possibilities with respect to their unmarked counterparts, as shown in Table 2.

Note that the evidence does not quite support an analysis of *nji-* as a syntactic valency-decreasing device.[12] While most middles may have transitive counterparts, this reflects the much greater proportion of transitive-patterning to

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[10]Middle situation types in Chini correspond mostly to Kemmer's (1993, 1994) findings, with some exceptions. In Chini, middles are mostly not used for changes in body posture, emotive speech actions, cognition, or grooming. Chini middles are characterized somewhat by lexical idiosyncrasy. The generic verbs for 'grow' include a middle for human and animal growth, but an unmarked intransitive for plant growth.

[11]By 'mutual' events I refer to Nedjalkov's (2007) work on reciprocals, where participants act "to/of/against/from/with each other", as shown earlier in (6). I generally follow Haspelmath (2023 [this volume]) in reserving "reflexive" and "reciprocal" for grammatical markers. I also use them to refer to those middles where reflexive or reciprocal meanings are always involved. For middle verbs where such meanings are more tenuous or a matter of interpretation, I use the terms "autopathic" and "mutual".

[12]Transitivity in Chini is best described as semantically-based. The coding frames and argument structural combinations of any given verb depend to a great extent on lexical semantics. For some verbs, the patterns generally cohere with the semantic maps fine-tuned by Comrie et al. (2015). However, area- and language-particular conceptualizations of verbal meanings also play a major role (cf. Pawley 2000). For example, the verb *ám-* 'cook' never indicates an accomplishment, only an (intransitive) activity. The affected participant of *mu-* 'become dusk' is

Table 2: Transitivity patterns for unmarked counterparts

Transitivity pattern of counterpart	Unmarked counterpart	Middle form
Unknown counterpart (Deponent forms)		*njimɨm-* 'urinate, shoot projectile poison'
		njagi- 'paddle (a canoe)'
Intransitive	*ch-* 'exist, live, be left/remain'	*njich-* 'exist unto itself/oneself, let something/someone be, never mind'
	pu- 'get upset'	*njipu-* 'thrash about, get all riled up'
Ambitransitive	*mbɨn-* 'last (time); well up (water); increase in pressure; pressure someone; stop by pressing (e.g. a recorder)'	*njimbɨn-* 'dry up (e.g. a swamp)'
	pu- 'float; set afloat, adrift (TLOC)'	*njipu-* 'drift off (downriver) (TLOC)'
Transitive	*yirɨv-* 'turn (something) over'	*njiyirɨv-* 'avert one's gaze'
	yu- 'pick/lift up'	*njiyu-* 'jump up, onto'

intransitive-patterning verbs in the lexicon. The presence of intransitive counter-parts and the occasional unpredictability of the argument structural alternations that occur between transitive-middle pairs suggest that *nji-* does not function to decrease valency (even if decreased valency is often characteristic of clauses headed by middles). The middle form *njiyɨyiyi-* means 'scratch (oneself)' but its

obligatorily (transitively) expressed (*bmu ŋimu* 'dusk dusked me'). For some ambivalent verbs, intransitive and transitive uses hardly differ: *nju-* 'bear offspring (INTR); give birth to (TR)'. For others, intransitive vs. transitive meanings are more distinct: *nji-* 'reside, be settled, set-tle (one's body) into a spot (INTR)' but 'set something down in upright position; plant sweet potato, taro, sugar cane, greens (TR)'.

transitive counterpart *yɨyiyi-* means 'itch' as in "my skin itches me" (and not: "(someone else) scratches me"). As in (24) in §4.1.1, some middles can even take patient-like objects. The patterns can be understood as syntactic effects of underlying semantic principles.

4.1.1 Argument structural behavior of middles

In §2.2.1, I described how verbs that take an object-like participant are associated with accusative, dative, or benefactive participant categories. It is precisely these argument types that rarely co-occur with middles. This can be seen in the middle forms of the paucactional (22) and pluractional (23) roots for 'perceive, know'. The former (*ndu-*) specifies a dative, the latter (*ŋgɨn-*) an accusative. The erstwhile benefactive is exemplified in (24). Reflexive (or reciprocal) relations can be based on coreference between the subject and any of these three object-like participant types:

(22) Erstwhile dative
agŋiŋri   agamkɨ njinduindaka...
agŋi-ŋri   agamkɨ **nji**-ndui=nda-ka
post.initiate.boy-PL all   MID-perceive.PC.R=SEQ-R
'All the boys looked at each other and then...' [Anton Mana, afi021218m_27:16]

(23) Erstwhile accusative
agŋiŋri   agamkɨ njiŋgɨninda.
agŋi-ŋri   agamkɨ **nji**-ŋgɨn-i-nda
post.initiate.boy-PL all   MID-perceive.PL-IRR-NEG
'None of the boys looked at each other.' [2018 Fieldnotes, elicited example]

(24) Erstwhile benefactive
anɨ ñimɨŋɨ nɨnjikavɨ.
anɨ ñimɨŋɨ nɨ=**nji**-kɨ-avɨ
3SG black   INS=MID-propel-TLOC.R.PC
'He painted himself black.' [2014 Fieldnotes]

As (24) also illustrates, middle clauses need not have monovalent argument structure. The most common multivalent pattern is the inclusion of an instrument. Although object-like participants are generally absent in middle clauses, it is nevertheless possible for some middles to co-occur with a patient-like argument. Consider the use of *njag-* 'surpass, put clothes on upper body' in (25).

(25) *achamɨ*   *njara!*
      achamɨ   **nji**-ara
      clothing.item MID-put.clothes.on.upper.body.OPT
      'Put a shirt on!' [Anton Mana, 2014 Fieldnotes, offered example]

4.2 Uses of the Chini middle

Uses of the Chini middle have in common the expression of a general type of action where, whatever degree of control the main participant has, they become affected or altered by it in the course of their participation. In §4.2.1, I discuss how, while the majority of uses and lexical meanings include reflexivity (or reciprocity), that inclusion hinges upon the degree of control of the agent. In §4.2.2, I discuss extensions of middle marking.

4.2.1 Three semantic subtypes of Chini middles

In §4.2.1.1, I discuss reflexive and reciprocal middles, where the main participant is equally agent and patient. In §4.2.1.2, I discuss unaccusative middles, where the main participant is purely a patient. In §4.2.1.3, I discuss the partially autopathic middles for verbal actions where the control of the agent is mitigated or otherwise ambiguous.

4.2.1.1 Reflexive and reciprocal middles

A common understanding of middles is a situation where "the participant both performs and undergoes the event" (Lichtenberk 2007: 1563). This is the most general and frequently encountered situation type for Chini middles, both in discourse and as represented in the lexicon. Drawing on Kemmer's (1994) notion of the relative elaboration of events in terms of participants, three possibilities in Chini are shown in Table 3. While some events are interpretable as autopathic (agents acting upon themselves), others are mutual (agents acting upon each other), while some may be interpreted either way as dependent on context.

   While the autopathic or mutual reading of many middle verb forms is uncontroversial (e.g., *njiña-* 'hide oneself'), some arise via a Chini-specific interpretation of events. The middle form *njaku-* is used to express (among other things) the sprouting of a plant. Upon comparison with its transitive counterpart *aku-* 'pull (something) out', the Chini expression of a plant sprouting (*njaku-*) involves the (conceptually autopathic) action of the plant "pushing itself out".

   Unlike reflexive constructions in many European languages for instance, in Chini, middles rarely involve part-whole relations, but there are a handful of

Table 3: Autopathic and mutual interpretations of reflexive middles

Transitive counterparts (unmarked)	Middle-derived forms (*nji-*)	Elaboration of events
(unknown counterpart)	*njag-* 'surpass, put shirt on (oneself)'	Strong autopathic interpretation
	njiŋgɨ- 'put trousers on (oneself)'	
aku- 'pull (something) out'	*njaku-* 'push (oneself, itself) out, sprout'	
ña- 'hide (something)'	*njiña-* 'hide (oneself)'	
aigŋ- 'write, draw'	*njaigŋ-* 'decorate (oneself, each other) in traditional paint, garb (for dance songs)'	Strong autopathic or mutual interpretation (based on participant number, context)
apri- 'teach (someone)'	*njapri-* 'learn (teach oneself, each other)'	
yiru- 'declare, call out, name'	*njiyiru-* 'designate (oneself, each other)' (also 'claim')	
auru- 'wash (something)'	*njauru-* 'bathe (oneself, each other)'	
(unknown counterpart)	*njiŋgɨ-* 'race (each other), talk over (each other)'	Strong mutual interpretation
	njigwri- 'argue'	
akɨ- 'marry (one's partner)'	*njakɨ-* 'marry (each other)'	
achim- 'amass, collect gather'	*njachim-* 'meet (up), gather (each other)'	
agɨ- 'press against, push (someone)'	*njagɨ-* 'be stuck, crammed together'	
ayi- 'help (someone) out'	*njayi-* 'help (each other) out'	

middles that do. In addition to the differentiation between clothing one's upper (*njag-*) vs. lower body (*njiŋgɨ-*) (both deponent forms), transitive *yirɨv-* 'turn (something) over' pairs with the middle *njiyirɨv-* which means 'avert (one's) gaze (i.e., in shame)'. The transitive verb *tɨ-* 'plant a garden, tubers' has a middle counterpart *njitɨ-* with part-whole semantics related to self-decoration, as shown in (26).

(26) *ayemŋgra   nɨnjitɨga.*
      ayemŋgr-a   nɨ=nji-tɨ-ga
      bird.of.paradise-NPL INS=MID-plant-R
      '…planted bird of paradise (feathers) (in their own hair).' [Ayirɨvɨ Mana, afi140514s_4:47]

In Chini, some situations commonly expressed by reflexivizers or middles cross-linguistically are expressed by other means, for instance by unmarked intransitives (e.g., *ambia-* 'boil'). Some situations are hardly expressed at all. What might be normal autopathic construals of events for an English speaker can prove absurd in the Chini sociocultural world (e.g. 'giving a gift to oneself'). Certain private autopathic actions like 'speaking to oneself' are in Chini expressed in terms of 'doing X *alone*'. It is only once multiple participants are involved, that a middle form can be used to express the event (and then, to express mutual relations), as shown in (27).

(27) *apwatɨ   mɨkɨnɨŋirati…   ma   añi ikɨ njichi.*
      apwatɨ   mɨ=kɨ-nɨŋi-ra-ti   m-a   añi ikɨ **nji-ch-i**
      out.in.the.open ALL=propel-TLOC-IRR-NEG DIST-DEF 1PL only MID-talk-IRR
      'Don't throw it out in the open… that, we shall only discuss amongst ourselves.' [Ayirɨvɨ Mana, afi040814m_29:58]

While the use of socially antagonistic verbs ('hate/kill/criticize/demean oneself') to express certain autopathic actions is standard in many languages, Chini linguistic practices (including in Tok Pisin) do not make use of such intentionally self-destructive concepts, at least not in overtly autopathic terms. A few middle forms do involve mutual actions with socially antagonistic verbs: *njaki-* 'fight' (based on its transitive counterpart *aki-* 'attack, shoot with spear/arrow'), and the deponent form *njigwri-* 'argue'.

4.2.1.2 Unaccusative middles

Unaccusative middles involve a main participant that exerts no control over the situation that affects them. If an agent is involved, they are clause-external. Their

defining characteristic is how straightforwardly their meanings are copied from their unmarked transitive counterparts (see Table 4 below). Haspelmath's (2017) distinction between 'automatic' and 'costly' unaccusative meanings is useful here. The unaccusative middles in Chini refer (mostly) to automatic situations (i.e., which need not involve external energy input) while their transitive counterparts refer to costly situations (and require external energy input). At least three situation types are distinguished.

There is one verb whose event type is outside those identified in Table 4. Uses of the unmarked (ambitransitive) verb *mba-* 'deceive, mislead, do/behave improperly' imply control of the main participant over the deception (including telling an actual lie), as in (28).

(28)   *na nu minigɨ   ndvɨrkɨkɨ*
     na nu mɨ=nigɨ   ndvɨ=ɨr-kɨ=kɨ
     and 2SG DIST=another 3SG.BEN=cut.PC-R=CNT.R
     mbãmhichi?
     mba-mh-i=ch-i
     mislead-IPFV-IRR=Z-Q.IRR
     'And as if you had cut some (savory bananas) for him, now here you are being misleading (i.e., acting as if he had behaved properly according to expectation).' [Ros Njveni, afi111016m_44:52]

In contrast, uses of the middle form *njimba-* 'deceive, be wrong, do/behave improperly' imply the absence of control (i.e., intentionality) in the act of deception (or the improper behavior). In (29), Emma informs Dorothy that she found the strainer she had at first forgot she had brought over for them to cook with.

(29)   *ku   njimba.*
     ku   nji-mb-a
     1SG.NOM MID-deceive-R
     '(I brought it down, here it is here it is), I was wrong.' [Emma Airɨmarɨ, 051116m, 22:44]

Chini thus makes use of the middle to make important semantic distinctions, for instance willful vs. accidental behavior.

Unaccusative middles generally preclude autopathic or mutual readings (unlike reflexive and reciprocal middles §4.2.1.1 and autopathic causal middles §4.2.1.3). For example, when the sediment base of the riverbed surfaces on a canoe journey, no use of the middle form *njiyu-* 'surface' can be conceived of in

Table 4: Unaccusative middles

Unmarked counterparts[a]	Middle-derived forms (*nji-*)	Situation type
vua~ - *	*njivuã-* 'break, burst, crack (via multiple fissures or holes)'	Unaccusative destruction
aivɨ- (PC), *ayima-* (PL)*	*njaivɨ-* (PC), *njayima-* (PL) 'break and collapse (tall narrow things)'	
irk- (PC), *mbu-* (PL)*	*njirk-* (PC), *njimbu-* (PL) 'break, cut (into separate parts)'	
ŋu- "(Eng. fell)"	*njiŋu-* 'fall (mature, non-palm trees only)'	
(unknown counterpart)	*njiyɨvr-* 'grow, change in size'	Unaccusative appearance
vr- 'be unable or unwilling to perceive or use'	*njivr-* 'become unrecognizable'	
agɨ- 'split into separate parts'	*njagɨ-* 'split, fork (a road or river)'	
yu- 'pick/lift up'	*njiyu-* '(re)surface (the riverbed)'	
kɨ- 'remove from enclosed space'	*njikɨ-* 'come loose, fall from enclosed space'	Unaccusative movement
pu- 'float in place (TLOC, INTR), set adrift (TLOC, TR)'	*njipu-* 'be adrift (TLOC)'	

[a]* ndicates identical meaning for transitive counterpart except in terms of agency.

terms of the sediment resurfacing or lifting itself. It is always the external agent of the receded water level that is to blame.[13] However, for a few verbs there are occasional exceptions where an autopathic (30) or mutual (31) interpretation is possible. These arise when external control is obliquely present in the context of the utterance.

(30) *anɨ njichi.*
      anɨ nji-ch-i
      3SG MID-exist-IRR
      '(He's sleeping) leave him be ("let him exist unto himself").' [2018 Fieldnotes, elicited example]

(31) *mɨnjagwuwa.*
      mɨ=nji-agwu-ga
      DIST=MID-put/pile.inside-R.PL
      'They (the dried tobacco leaves) are overly piled up (i.e., on each other).' [Dorothy Paul, afi151116m_35:54]

4.2.1.3 Mitigated control and partially autopathic middles

This middle subtype refers to verbal meanings where the control of the agent is mitigated by some external force or is somehow otherwise ambiguous. For these situations, the question of the main participant's control over the activity may be less straightforward than clear presence (§4.2.1.1) or absence (§4.2.1.2). As I discuss below in §4.2.1.3.2, there is a tendency for partially autopathic readings, though this is not always the case. The verbs in Table 5[14] give an initial impression. In contrast, in §4.2.1.3.1, I discuss verbal activities involving mitigated control of the agent, that is, where their erstwhile semantic agenthood gives way to patienthood as the activity they initiated comes to affect them in some key way.

4.2.1.3.1 Mitigated control

Mitigated control over the action is especially true of activities where the participant exerts agentivity as an initiator of the action, but then loses control in some

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[13]Just like other verbs, middles can be polysemous. The unmarked transitive *yu-* 'pick, lift up' is not polysemous. Its middle form is: *njiyu-* 'resurface (the riverbed); jump up, onto'.

[14]A number of middle verbs of motion and of bodily function listed in Table 5 may first appear to represent instances of lexical idiosyncrasy, something understood to be characteristic of middles (Kemmer 1994). Part of my argument in this section, however, is that the marking of some verbs as middles may not be idiosyncratic as it seems, but is instead due to semantic properties like mitigated control.

Table 5: Middles involving mitigated or ambiguous control

Unmarked counterparts	Middle-derived forms (*nji-*)	Situation type
ambɨñ- 'laugh at (someone) (i.e., with amusement)'	*njambɨñ-* 'laugh'	Externally-oriented bodily function or emotion
pu- 'be upset (at someone, about something)'	*njipu-* 'get (oneself) riled up (i.e., over something), thrash about in anger'	
(unknown counterparts)	*njumia-* 'vomit'	
	njimim- 'urinate, shoot projectile poison (frogs)'	
	njavi- 'defecate'	
	njimbovɨ- 'burp'	
	njagi- 'paddle (a canoe)'	Action or state leading to further action or state
	njigwunɨŋi- 'dance about (with each other) (TLOC)'	
	njari- 'be off, get up to leave'	
	njinku- 'do repetitive back-and-forth or up-and-down motion (e.g. swing, see-saw, do pull-ups)'	
	njirɨv- 'jump down, off'	
	njaŋgu- '(cause, allow oneself to) waste time, dilly-dally'	
yu- 'pick/lift up'	*njiyu-* 'jump up, onto'	
aŋvu- 'reduce (something)'	*njaŋ(v)u-* 'bend (oneself) down'	
ñi- 'get, retrieve (someone or something)'	*njiñi-* 'for something to make contact with itself via movement, especially back-and-forth'	
yim- 'chew betel nut (the action of chewing it)'	*njiyim-* 'chew betelnut (and experience its narcotic effect)'	

way to become affected by the outcome. Chewing betel nut includes not only the agentive process of combining the ingredients and physically chewing them, but also a chemical reaction resulting in a slightly narcotic effect and heightened sociability. So, the participant is construable as a patient in the chemical and social process, and this is reflected in the grammar of the Chini middle. The transitive verb *yim-* 'chew betel nut' and its corresponding middle form *njiyim-* 'chew betel nut' subtly distinguish the two possibilities for this event in terms of control. To indicate only the action of the chewing without reference to the chemical or social effect, the transitive form is used, as in (32).

(32) *nu miagɨ   yiminɨkaya*
     nu   mia-gɨ   yim-i-n-ɨ=ka=ya
     2sg betel.nut-npl chew.betel.nut-irr-nmlz-npl=prox.def=top
     'Given that you're in the middle of chewing betel nut like that...' [Emma Airɨmarɨ, afi260814m_2:48]

In contexts like (32), the complete control of the agent over the act of chewing the betel nut (vs. spitting it out) is subtly expressed by the transitive form.

When the middle form is used, it is instead the semantic patienthood of the main participant that becomes subtly present. For example in (33), a couple of people saw I was chewing betel nut from across the way. In their question as they smiled and shouted over to me, they used the middle form *njiyim-*, thereby referring to the full process of chewing betel nut including its positive psychosocial effects.

(33) *nu njiyimkɨyi?!*
     nu   nji-yim-kɨ=y-i
     2sg mid-chew.betel.nut-r=z-q.irr
     'Are you chewing betel nut (i.e., and feeling pleasant/chatty)?!' [2016 Fieldnotes]

Differing degrees of control might help explain some cross-linguistic differences in terms of which situation types get marked as middles. (Kemmer 1993, 1994) describes the cross-linguistic tendency for middles to be used in situations of translational and non-translational motion, including posture. But in Chini, only those motions and postures where the control of the main participant is mitigated count as middles. Going/coming (*aŋɨ-*), heading upriver (*agɨ-*), downriver (*ri-*), sitting down (*pɨ-*) and many others typically involve an action over which the main participant has full control, and where the main participant is not

necessarily drawn into further subsequent activity. In contrast, bending down (*njaŋ(v)u-*) requires that one eventually bend back up; jumping up (*njiyu-*) or down (*njirɨv-*) leads to some further trajectory, as does getting up to leave (*njari-*) – which leads, inevitably, to that person leaving. For some verbs, especially of motion and posture, the participant's control may be seen as only minimally compromised (e.g. swinging or paddling). For others, it may be more strongly compromised. Bodily functions arguably fall into this category. Only those bodily functions where some degree of control is (at least initially!) exerted (see Table 5) occur as middles. Bodily functions seen as involving no exertion of control occur as unmarked intransitives (*ayi-* 'sneeze' and *chã-* 'cough').

4.2.1.3.2 Partially autopathic readings

Here I discuss how motions, postures, bodily functions and other situation types involving a loss of control are readily interpretable in terms of partial autopathy. Lexical semantics can prove quite important to understanding why certain verbal events expressed by middles have autopathic readings. For middles of motion and posture, the potential for autopathic readings could be related to resultative semantics. Where resultatives express a "state produced by the corresponding action" (Kozinsky 1988: 498), middles like *njinku-* 'swing back and forth' and *njiyim-* 'chew betel nut' express a secondary action or change of state produced by the initial action of the verb. So, one's choice to participate in an event leading to a loss of control allows for a reading of partial (or mitigated) autopathy. This principle is also evident in the semantic differences between some middle forms with their transitive counterparts (e.g., *yu-* 'pick, lift up' vs. *njiyu-* 'jump up, onto' in the sense of 'pick, lift oneself up, onto' and *aŋvu-* 'reduce (something)' vs. *njaŋ(v)u-* 'bend down, over' in the sense of 'reduce oneself').

For some middles, however, the felicitousness of an autopathic reading may be more questionable as a matter of context or even individual interpretation. Consider the (deponent) middle verb form *njagi-* 'paddle (i.e., oneself, each other along)'. Participation involves dipping and pushing the oar, at which point the resulting force of the push propels the canoe and its occupant(s) across the water. Another example is *njambɨñ-* 'laugh'. It derives from its transitive counterpart *ambɨñ-* 'laugh at (someone)'. On the one hand, laughter can involve a loss of control. Yet one can spur oneself and (especially) others to laughter, leading to the possibility for autopathic or mutual readings for the middle form ('make oneself/each other laugh'). As in other languages, the control of main participants in emotional-psychological states and also excretive bodily functions can be seen as

ambiguous, though context often resolves any apparent ambiguity in the lexical semantics.

I have described how the Chini middle functions to express the main participant in a clause as a semantic patient. Along the way, I have argued that the intertwining of autopathic (and mutual) meaning arises as a secondary semantic effect. The more control the main participant is understood to exert, the more felicitous the autopathic reading is likely to be. The link is not grammatically rigid, but rather depends on the interplay between lexical semantics, context, and interpretation. While the division of three subtypes I have proposed here is in one sense a mere artefact of my description, it arguably reflects differences in control across middle situation types.

4.2.2 Extensions of middle marking

In a few constructions, the middle marker attaches not as a verbal prefix but as a proclitic to the verb complex. In that capacity it functions as a reflexivizer or reciprocal marker. While I have argued that the middle marker is not in fact a reflexivizer but that autopathic and mutual interpretations of middles arise as a secondary feature of the main participant's limited control over events, in these constructions, the autopathic and/or mutual meaning appears to be what motivates the presence of the middle marker.

In §4.2.1, I mentioned bodily functions as a common middle situation type in Chini and alluded to the related squeamish theoretical question of how construable those events are in terms of autopathy and control. In contexts where one participant is negatively affected by the bodily functions of another, the entirety of the action is not construable as autopathic (even if the bodily function itself is), as shown in (34).

(34)   *mɨnɨmhinjavia.*
       mɨ=nɨ=mhi=nji-avi-a
       DIST=3SG.ACC=FOC.ALL=MID-defecate-R
       'It (the puppy) pooped on her.' [2018 Fieldnotes, elicited example]

Bodily functions become undeniably autopathic in those unfortunate situations when the main participant is both agent and patient. This is expressed in Chini by a construction where the middle marker is introduced by the focused allative. This 'double middle' construction is restricted to those pronominal person-number combinations that distinguish a dative case, (35). (1SG and all dual participants require the expected accusative or invariant pronominal forms instead of the middle marker).

(35)   Reflexive 'double' middle
  anɨ vrɨmɨ njimhinjimimkɨ.
  anɨ vrɨmɨ **nji**=mhi=**nji**-mim-kɨ
  3SG mistakenly MID=FOC.ALL=MID-urinate-R
  'S/he mistakenly urinated on him/herself.' [2018 Fieldnotes, elicited example]

Finally, the middle marker occurs as part of the reciprocal comitative construction (36), and the reciprocal sociative construction (37).[15]

(36)   Reciprocal comitative
  aŋɨ njiŋɨ yu.
  aŋɨ **nji**=**ŋgɨ** yu
  1DU MID=COM go.IRR
  'We two will go with each other.'

(37)   Reciprocal sociative
  aŋɨ njavɨgɨ yu.
  aŋɨ **nji**=**avɨgɨ** yu
  1DU MID=upper.arm go.IRR
  'We two will go together (i.e., side by side, in friendship, etc.).'

5 Conclusions

In this paper I have described those constructions in Chini where autopathic (and/or mutual) relations between participants figure prominently in linguistic expression. One is the reflexive possessive construction, where the form *ŋɨ*= is based on coreference between the possessor and the topic (whether subject or otherwise) or semantic agent.

The other is the middle construction. Middles can be distinguished in terms of the differing degrees of agency of the main participant, whether agency is more or less present (§4.2.1.1), absent (§4.2.1.2), or mitigated (§4.2.1.3). The Chini middle is not used to indicate autopathic relations between participants per se, but rather indicates the semantic patienthood of the main participant across different types of situations. Autopathic (and mutual) readings are possible to the extent that the main participant exerts full or partial control over the action or as permitted by lexical semantics and/or the context of the utterance. Yet autopathic

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[15]As Zaliznjak & Shmelev (2007: 213) describe for Latin, the sociative in Chini expresses "participation on equal grounds".

meaning is deeply bound up with the Chini middle. That this is true is seen in the extensions of middle marking to other constructions, namely the double middle for accidental bodily functions, and the reciprocal comitative and sociative constructions (§4.2.2).

Acknowledgments

Abbreviations

This chapter follows the Leipzig Glossing Rules (Comrie et al. 2008). Additional abbreviations used are:

ACCOM	accompaniment	PL	plural nominal number or pluractional verbal number
ADESS	adessive		
ANC	ancestral		
CNT(.R/IRR)	continuity of information	PRE(.R/IRR)	presuppositional information
CONJ	conjunctive	Q(.R/IRR)	question suffix
CTRST	contrastive	R	realis mood
LH	light head	SEQ(.R/IRR)	temporal succession
MID	middle	SIM	simulative
MOD	modal verb base	TLOC	translocative directionality
NEW	newly-experienced		
NPL	non-plural nominal number	TRANS	translational directionality
OPT	optative mood	Z	category-conditioned suffix form that marks a wide range of clause types
PC	paucactional verbal number		

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