Definiteness in Shan*

Mary Moroney

Cornell University, Ithaca, New York, USA
mrm366@cornell.edu
http://conf.ling.cornell.edu/mmoroney/about.html

Abstract. Shan, a Southwestern Tai language spoken in Myanmar, Thailand, and nearby countries, uses bare nouns to express both unique and anaphoric definiteness, as identified by [11]. This novel data pattern from the author’s fieldwork can be analyzed by adding an anaphoric type shifter, $\iota_x$, to the available type shifting operations defined by [2] and [3]. It also demonstrates that the consistency test is not sufficient to determine what counts as a definite determiner for a language.

Keywords: definiteness · type-shifting · Tai language.

1 Introduction

[11] proposes that there are two types of definiteness expressed by German, corresponding to the contracted (weak) and non-contracted (strong) preposition + definite article combinations—e.g., vom (‘by the’, weak) and von dem (‘by the’, strong). In (1), the speaker and listener know that there is only one mayor in the context. Since the mayor is unique in the context, the weak definite article form, vom (‘by the’) is used and the strong form is infelicitous.

(1) Weak versus strong articles in German ([11]: (42))

Der Empfang wurde vom / #von dem Bürgermeister
the reception was by-the/weak by the-strong mayor
eröffnet.
opened
‘The reception was opened by the mayor.’

[11] claims that the split between strong and weak definite forms fits well with the types of definiteness described by [5], which grouped definiteness into four categories: immediate situation (current non-linguistic context), larger situation (broader non-linguistic context), anaphoric/familiar, and bridging (associative anaphora). [11] says that when a noun is unique in an immediate situation or larger situation context, German uses the weak form of the definite article, and

* Thanks to Nan San Hwam, Mai Hong, and Sai Loen Kham who provided the Shan data. Thanks also to Sarah Murray, Miloje Despic, the Cornell Semantics Group, and ESSLLI reviews for all their feedback. All errors are my own.
in anaphoric contexts it uses the strong form. For the bridging category, he
discusses two types: producer-product and part-whole bridging, which I will call
‘product-producer’ and ‘whole-part’ bridging, respectively. The strong form is
used in product-producer situations and the weak form is used in whole-part
bridging. In addition to the categories discussed by [5], [11] adds that donkey
anaphora uses the strong form of the definite article. Table 1 gives examples of
these categories and the article form used for German. These will be discussed
more in the following section.

<table>
<thead>
<tr>
<th>Type of Definite Use</th>
<th>Example</th>
<th>German</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unique in immediate situation</td>
<td>the desk (uttered in a room with exactly one desk)</td>
<td>weak</td>
</tr>
<tr>
<td>Unique in larger situation</td>
<td>the prime minister (uttered in the UK)</td>
<td>weak</td>
</tr>
<tr>
<td>Anaphoric</td>
<td>John bought a book and a magazine. The book was expensive.</td>
<td>strong</td>
</tr>
<tr>
<td>Bridging: Product-producer</td>
<td>John bought a book today. The author is French.</td>
<td>strong</td>
</tr>
<tr>
<td>Bridging: Whole-part</td>
<td>John was driving down the street. The steering wheel was cold.</td>
<td>weak</td>
</tr>
<tr>
<td>Donkey anaphora</td>
<td>Every farmer who owns a donkey hits the donkey</td>
<td>strong</td>
</tr>
</tbody>
</table>

### 2 Uniqueness and Anaphoricity

[11] claims that the weak definite article in German expresses *uniqueness*. This
can be uniqueness in an immediate situation, as in (2), or in a larger or global
context, described further below. In (2), there is only one glass cabinet in the
immediate context, so the weak definite must be used.

(2) **German:** *Unique in immediate situation ([11]: (40))*

Das Buch, das du suchst, steht im / #in dem Glasschrank.

‘The book that you look for stands in-the weak / in the strong glass-cabinet.’

The strong definite article expresses *familiarity/anaphoricity*. In (3), the first
sentence introduces a writer and a politician into the discourse context. In the
second sentence *von dem Politiker* (‘from the politician’) is used to refer back
to the politician. The strong definite form must be used in this context.

1 A review noted that what [11] calls ‘part-whole’ bridging would more correctly be
called ‘whole-part’ bridging, and agreeing with their assessment, I will use that and
(3) **German**: Anaphora ([1]: (23))
Hans hat einen Schriftsteller und einen Politiker interviewt. Er hat
Hans has a writer and a politician interviewed. He has
vom / von dem Politiker keine interessanten Antworten
from-the weak / from the strong politician no interesting answers
bekommen.
gotten
‘Hans interviewed a writer and a politician. He didn’t get any interesting
answers from the politician.’

Looking at Mandarin and Thai, [7] and [8] show that these languages use bare
nouns in the same places where German would use the weak definite article, and
noun phrases modified by a classifier and demonstrative where German would
use the strong definite article. Examples (4) and (5) show the use of the bare
noun in a unique situation in Mandarin and Thai, respectively.

(4) **Mandarin**: Unique in immediate situation ([7]: (12b), citing [1]:
Gou
dog
yao guo mali.
want cross road
‘The dog(s) want to cross the road.’

(5) **Thai**: Unique in immediate situation ([8]: (2))
mah
dog
kamla hw.
bark
‘The dog is barking.’

In (6a) and (7a), are the Mandarin and Thai examples using demonstratives
to express familiarity/anaphoricity. In (6a), a boy and a girl are introduced into
the discourse context. (6b) and (6c) use na ge nansheng (‘the/that boy’), a noun
modified by a classifier and demonstrative, to refer back to the boy. In Mandarin
there is a contrast between the subject and object position. The classifier and
demonstrative are optional in subject position, but not in object position, as
shown in (6b) and (6c). [7] claims that this is because the Mandarin subject is
a topic, which negates the need for an antecedent index.

(6) **Mandarin**: Narrative sequence (Anaphoric) ([7]: (16a,b,d))
a. jiaoshi li zuo-zhe yi ge nansheng he yi ge
classroom inside sit-prog one clf boy and one clf
nansheng,
girl
‘There is a boy and a girl sitting in the classroom...’

b. Wo zuotian yudao #na ge nansheng
I yesterday meet that clf boy
‘I met the boy yesterday.’

c. (na ge) nansheng kan-qi-lai you er-shi sui zuoyou.
that clf boy look have two-ten year or-so
‘The boy looks twenty-years-old or so.’
In the Thai example in (7), (7a) introduces a student into the discourse context. In (7a), *nákri*n *khon nán* ("that boy") is used to refer to the boy. (7b) suggests that the demonstrative is required even in subject position for Thai.

(7) **Thai: Narrative sequence (Anaphoric) ([8]: (17))**

`miawaan phó*m cào kàp nákri*n khon nán.`

Yesterday 1ST meet with student **CLF INDEF**

'Yesterday I met a student'

a. *(nákri*n) khon nán / (kháw) chalàat m água.*

student **CLF that / 3P clever very**

'That student/(s)he was very clever.'

b. #*nákri*n chalàat m água.*

student clever very

'Student are very clever.'

2.1 **Associative Anaphora (Bridging)**

[11] shows that in German, there is a split between whole-part and product-producer bridging in terms of definiteness marking: whole-part bridging uses the weak definite and product-producer bridging uses the strong definite. [7] and [8] show that Mandarin and Thai patterns with German, using the bare noun in whole-part examples (weak definiteness) and the demonstrative in product-producer examples (strong definiteness). In this section and the following one, only the Thai data is shown to conserve space. In [8], *thábian* ("sticker") cannot be modified by a demonstrative. This parallels the use of the weak definite for whole-part bridging in German.

(8) **Thai: Whole-part bridging ([8]: (11))**

`rót khon nán thán thàm rát sàkàt phró? màj,dàj tit car **CLF that ADV.PAS police intercept because NEG attach** satikwáj thìi thábian (#baj nán).`

sticker keep at license **CLF that**

'The car was stopped by police because there was no sticker on the license.'

In [9], the producer *náktëeqklò*n (‘poet’) must be modified by a demonstrative. This parallels German’s use of the strong definite for product-producer bridging.

(9) **Thai: Product-producer bridging ([8]: (12))**

?â*l khít wáa klon bót nán pró? màak, mëx-wá kháw cà Paul thinks **COMP poem **CLF that melodious very although 3P **IRR màj chó*p náktëeqklò*n #(khon nán).**

NEG like poet **CLF that**

'Paul thinks that poem is beautiful, though he doesn’t really like the poet.'
2.2 Donkey anaphora

In cases of donkey anaphora, [11] claims that German uses the strong article to refer to nouns introduced in the first part of the construction. Similarly, in Thai and Mandarin, a demonstrative is required in those positions ([7]; [8]). For the Thai example in (10), using the bare noun to refer back to the buffalo gives the sentence a generic meaning ‘Every farmer that has a buffalo hits buffalo’.

(10) **THAI: DONKEY ANAPHORA ([8]: (23))**

chaawnaa th˚ khou th˚i m˚i *khwaai tua ni˚* t˚i *khwaai tua*
farmer every CLF that have buffalo CLF INDEF hit buffalo CLF
n˚n˚
that

‘Every farmer that has a buffalo hits it.’

Table 2 summarizes the patterns of definiteness expression in German, Thai, and Mandarin. Examples of all the contexts described by [11] cannot be included due to space limitations, but they can be found in the cited sources.

Table 2. Expressions of definiteness in German, Thai, and Mandarin

<table>
<thead>
<tr>
<th>Type of Definite Use</th>
<th>German ([11])</th>
<th>Thai ([8])</th>
<th>Mandarin ([7])</th>
</tr>
</thead>
<tbody>
<tr>
<td>Immediate situation</td>
<td>weak</td>
<td>bare</td>
<td>bare</td>
</tr>
<tr>
<td>Larger situation</td>
<td>weak</td>
<td>bare</td>
<td>bare</td>
</tr>
<tr>
<td>Anaphoric</td>
<td>strong</td>
<td>dem.</td>
<td>dem.</td>
</tr>
<tr>
<td>Bridging: Product-producer</td>
<td>strong</td>
<td>dem.</td>
<td>dem.</td>
</tr>
<tr>
<td>Bridging: Whole-part</td>
<td>weak</td>
<td>bare</td>
<td>bare</td>
</tr>
<tr>
<td>Donkey anaphora</td>
<td>strong</td>
<td>dem.</td>
<td>dem.</td>
</tr>
</tbody>
</table>

3 Shan

Like Mandarin and Thai, Shan, a Southwestern Tai language spoken in Myanmar, uses the bare noun in unique situations, as shown in ([11] and (12)). In ([11]), there is a single teacher in the context, so it must be referred to using a bare noun. In (12), world knowledge tells us that there is only one sun, so a bare noun is used to refer to the sun. The demonstrative is not felicitous in either case.

Data for this paper comes from the author’s fieldwork in Chiang Mai, Thailand from January 2018 to present, working with a speaker from Keng Tawng City in Shan State, Myanmar, who has lived in Thailand for over 10 years. Data was collected using a variety of elicitation methods: story translation, stories based on storyboards, felicity judgments on grammatical sentences in specific contexts.

(11) **Shan: Unique in immediate situation**  
(Context: classroom with just one teacher)  
Náaŋ Län ?ànn tsaaŋ kwàa hāa klúusən (#kó nán)  
Ms. Lun NEG able go find teacher CL.PERSON that  
‘Ms. Lun cannot find the teacher.’

(12) **Shan: Unique in larger situation**  
káaŋwán (#hój nán) lóŋ hv sòng.  
sun CL.ROUND that very bright glitter  
‘The sun is very bright.’  
(Speaker comment on the demonstrative: there is more than one sun)

3.1 **Anaphora**

Unlike Mandarin and Thai, Shan can use the bare noun in anaphoric contexts such as a narrative sequence. In (13), the first sentence introduces a man into the discourse context. In following sentences, the man can be referred back to either using a bare noun, *phu-tsáaj* (‘man’), or using a bare noun modified by a classifier and demonstrative, *phu-tsáaj kó nán* (‘that man’)[4].

(13) **Shan: Narrative Sequence (Anaphora)**  
*phu-tsáaj kó núŋ kwàa tì hāan khāaj māa tāa sū mā person-man CL.PERSON one go at store sell dog for buy dog ?ànn tó núŋ pān luk jìŋ mān-tsáaj... phu-tsáaj small CL_ANIMAL one give child girl 3-man person-man (kó nán) klúum tòp wàa, CL.PERSON that back respond that  
‘A man went to a dog store to buy a puppy for his daughter... The/that man replied,’

In (14), the first sentence introduces a notebook and cup of water into the discourse context. The second sentence refers back to each of them using a bare noun. Here the anaphoric nouns are in object position, but this position does not require that a demonstrative be used. In this way, Shan is different from Mandarin or Thai. The demonstrative is allowed, but it sounds awkward to use a demonstrative for both the water cup and notebook in the second sentence.

---

[4] A reviewer noted that the examples from Mandarin and Thai are not equivalent in that the Mandarin one introduces two individuals apart from the speaker, and the Thai one only introduces one other individual. For Shan, I have included both types of examples. In (13) there is only one individual, and in (14) there are two.
(14) SHAN: NARRATIVE SEQUENCE (ANA PHORA)
 páp māaj le kōk nām jū wāj nē phēn. khaa qāw kōk nām
 book note and cup water IMPF stay on desk 1.SG take cup water
 (nān) he sāj/saū páp (nān).
 spill in book CL.BOOK that
 ‘There is a notebook and a cup of water on the desk. I spilled the/that
cup of water onto the/that notebook.’

3.2 Bridging

Mandarin, Thai, and German use the weak/bare form of the nominal in whole-
part bridging and the strong/demonstrative form in product-producer bridging.
Shan, instead, does not use different nominal expressions in whole-part bridging
versus product-producer bridging. A bare noun can be used in both situations.
(15) shows that a bare noun is possible for whole-part bridging in Shan.

(15) SHAN: WHOLE-PART BRIDGING
 khūsvan kwāa tsū hîntyk láj nān sē töj phákṭū
 teacher go to building CL.BUILDING that and knocked door
 hōŋ tsaw hîn
call owner building
 ‘The teacher approaches that building and knocked on the door to call
the owner.’

Whole-part bridging constructions in Shan often have the ‘whole’ as part
of the word for the ‘part’. It is not always clear whether it simply anaphoric with the
‘whole’ possessing the part or involves bridging to a real noun compound. (16)
shows an example of this where naasv pāplik (‘book cover’) contains the word
pāplik (‘book’). While it is possible to modify the noun with a demonstrative,
the demonstrative is referring to the book rather than the cover. It does not
seem possible to modify the bridged noun with a demonstrative.

(16) SHAN: WHOLE-PART BRIDGING
 mēw mēŋkjōk sāj nē pāplik ?fān mí nē phēn māa kwāa tsām
 cat jump in on book COMP exist on table dog go follow
 theŋ thīn tī hēt hāj naasv pāplik (nān)
 again until COMP do cause cover book that dirty go
 sēŋ
 completely
 ‘The cat jumped onto the book that was on the table. The dog followed
again which made the book cover/cover of that book completely dirty.’

(17) shows that a demonstrative is not necessary for product-producer bridg-
ing either. The ‘producer’, kōntemlik (‘author’) can be bare or modified by the
demonstrative, kō nān. From the classifier we can tell that this demonstrative
modifies ‘author’ not ‘book’.
Definiteness in Shan

(17) **SHAN: PRODUCT-PRODUCER BRIDGING**

mywáa khú ?aan páplik pún táj, khúsôn pén ?ójkó kán
yesterday teacher read book history Tai teacher be friend together
táj kóntemlik (kó nân)
with author CL.PERSON that

‘Yesterday, the teacher read a Tai (Shan) history book. The teacher is friends with the/that author.’

3.3 **Donkey anaphora**

German, Thai, and Mandarin use the strong/demonstrative form of the nominal to refer anaphorically to a nominal in donkey anaphora. Unlike the other languages, Shan does not use a demonstrative or strong definite article in this situation. In (18), when ‘cat’ (méw) is referred to anaphorically, a bare noun is used. It is not felicitous to modify it with a demonstrative because that forces a singular reading, which sounds awkward in this sort of generic sentence.

(18) **SHAN: DONKEY ANAPHORA**

máa ku tó náj pó hán méw náj tê lúp lám
dog every CL.ANIMAL this if/when see cat then will follow chase
méw (*tó nân) tãasè
cat CL.ANIMAL that always

‘Every dog, if it sees a cat will always chase the cat.’

If we wanted to use a demonstrative in this sort of example, a structure like (19) would be possible, but, again, the classifier-demonstrative modification is not necessary. The difference between these two examples is that in (18) it is dogs being quantified over, leaving ‘cat’ as unspecified for plurality and thus awkward with a singular anaphor. In (19), tó láj (‘which one’) quantifies over individual cats making it compatible with a singular anaphor.

(19) **SHAN: DONKEY ANAPHORA**

máa náj hán méw to láj kò tê lúp méw
dog this see cat CL.ANIMAL which even will follow cat
(tó nân) tãasè
CL.ANIMAL that always

‘Dogs, whichever cat they see they will always chase the/that cat’

Table 3 summarizes the different expressions of definiteness found in German, Thai, Mandarin, and Shan. This section has investigated the pattern of definiteness found in Shan in specific contexts that have shown different patterns of expression across languages. Shan allows for the bare noun to be used in all of the contexts described by (11). Even contexts like anaphora and product-producer bridging allow for bare nouns where Thai and Mandarin do not. For contexts were the noun is unique in a situation or with whole-part bridging, a demonstrative cannot modify the noun, just like in Thai and Mandarin.
Table 3. Expressions of definiteness in German, Thai, Mandarin, and Shan

<table>
<thead>
<tr>
<th>Type of Definite Use</th>
<th>German ([11])</th>
<th>Thai ([8])</th>
<th>Mandarin ([7])</th>
<th>Shan</th>
</tr>
</thead>
<tbody>
<tr>
<td>Immediate situation</td>
<td>weak</td>
<td>bare</td>
<td>bare (11)</td>
<td></td>
</tr>
<tr>
<td>Larger situation</td>
<td>weak</td>
<td>bare</td>
<td>bare (12)</td>
<td></td>
</tr>
<tr>
<td>Anaphoric</td>
<td>strong</td>
<td>dem.</td>
<td>dem. (13)</td>
<td>bare (14)</td>
</tr>
<tr>
<td>Bridging: Product-producer</td>
<td>strong</td>
<td>dem.</td>
<td>dem. (13)</td>
<td>bare (17)</td>
</tr>
<tr>
<td>Bridging: Whole-part</td>
<td>weak</td>
<td>bare</td>
<td>bare (16)</td>
<td></td>
</tr>
<tr>
<td>Donkey anaphora</td>
<td>strong</td>
<td>dem.</td>
<td>dem. (18)</td>
<td>bare (19)</td>
</tr>
</tbody>
</table>

4 Analysis

Following [2] and [3], [4] summarizes the available interpretations of bare nouns in languages without articles, claiming they can have a kind reading, a narrow scope existential reading, and a definite reading. This appears to be consistent with what is found in Shan. [2] claims that bare nouns in article-less languages without number marking, like Shan, obligatorily have an e-type, kind denotation. However, [4] allows for these mass nouns to undergo type shifting using ⊃ so they can then type-shift using ∈ to get a definite reading separate from the kind reading. For now, I will assume this, following [4], but this topic should be considered in future work. The type-shifting operators described by [2] and [3], ⊃, ∈, and ∃, are defined below:

\[
\text{Type shifting operators ([3]): } (e, t) \rightarrow e/((e, t), t)
\]

a. \(\forall P \lambda x[P_s(x)]\)
b. \(\lambda P \lambda x[P_s(x)]\)
c. \(\exists P \exists x[P_s(x) ∧ Q(x)]\)

[3], revising [2], proposes that the type shifting operators follow a hierarchy, where kind-forming \(\forall\) and entity forming \(\exists\) must be ruled out before \(\exists\) becomes available, this is described in [21]. The justification is that using \(\forall\) or \(\exists\) is a less drastic change because it does not introduce quantificational force. [3] claims that bare nouns are equally allowed to form kinds or entities, so they must be ranked equally. [3] and [2] use the Blocking Principle, defined in [22], to identify what type shifting is available in what language. If a language has an overt determiner form of a type shifter—e.g., the in English is said to correspond to \(\exists\)—then covert type shifting using that operator is unavailable.

In a language where there are are no determiners, you would expect all type-shifting operations to be available, but according to [3], ∃-type shifting does not occur in these languages because of the ranking described in Meaning Preservation below. The existential interpretation comes form Derived Kind Predication. This is an interesting subject for future investigation, but not addressed here.
(21) **Meaning Preservation:** \{∩, ι\} ⊆ \exists

(22) **Blocking Principle** [3]: For any type shifting operation \(\pi\) and any \(X\):

\(\text{for every set } X \text{ in its domain, } D(X) = \pi(X).\)

[7] follows [11] in claiming the existence of two types of definiteness. In trying to account for the obligatory use of the demonstrative in some definite environments in Mandarin, [7] defines the unique and anaphoric definites as in (23), where (23a) is the type shifting operation \(ι\) and (23b) is the denotation of the demonstrative in Mandarin.

6 This definition differs from [11] in that the index is defined as a property rather than an individual, but I will not be concerned with this distinction for this analysis.

[8] claims that since English expresses both unique and anaphoric definites using the \(\text{the, the}\) is ambiguous for the unique and anaphoric definite meaning.

(23) a. **Unique definite article:**

\[ [ι] = \lambda s_r. \lambda P_{(e,(s,t))} : \exists ! x [P(x)(s_r)] \land \exists x P(x)(s_r) \]

b. **Anaphoric definite article:**

\[ [ι^x] = \lambda s_r. \lambda P_{(e,(s,t))} , \lambda Q_{(e,t)} : \exists ! x [P(x)(s_r) \land Q(x)] \land \exists x P(x)(s_r) \]

It is clear from the data that the Shan demonstrative does not fill the roll of anaphoric definite determiner since it is not obligatory in all anaphoric contexts as in Thai. I propose, instead that Shan has a null anaphoric type shifter \(ι^x\) in addition to the \(ι\) type shifter.

This analysis raises the question: Why does the Shan demonstrative not count as a determiner for the purposes of the Blocking Principle, but the Thai and Mandarin ones do? We might expect the Shan demonstrative to pattern differently from the Mandarin and Thai demonstratives in terms of the Consistency test. [3] uses the Consistency test from [9] to distinguish between demonstratives and true definites. For demonstratives, you can introduce two of the same NPs modified by the demonstrative with contradictory predicates, and there is no contradiction. For definite determiners, doing this would create a contradiction. According to this test, Shan has a demonstrative, not a definite determiner, as shown in (24). However, the Thai demonstrative also passes this test, as in (25).

(24) **Shan: Consistency test**

(Context: I am holding a white cup and a black cup.)

kʊk hʊj nāj pɛn sǐ kʰaaw. kʊk hʊj nāj pɛn sǐ
cup cl.round this be color white cup cl.round this be color
lām.
black
‘This cup is white. This cup is black.’

7 Mandarin passes the consistency test too, but the data is not included here to conserve space.
Thai: Consistency test (8, citing 10)

dēk khon nān nān yūn tēē dēk khon nān māi.dāi nān yūn.
child CLF that sleep IMPF but child CLF that NEG sleep IMPF

‘That child is sleeping but that child is not sleeping.’ (cf. #the)

According to a native Thai speaker, (25) sounds contradictory out of the blue, but fine with deixis. This test does not seem sufficient to distinguish between what counts as a definite for the Blocking principle. This is not that surprising since the consistency test relies on deixis which is not something that comes into play in anaphoric uses of demonstratives.

I would argue that the Shan bare noun/demonstrative contrast parallels the English the/demonstrative contrast. The difference comes from the fact that the bare noun in Shan can denote a broader range of things, which might lead to more disambiguation using the demonstrative. We would then expect the use of the demonstrative in Shan to convey some special meaning beyond ι in the same way the English demonstrative can.

5 Conclusion

Shan can use a bare noun to express both unique and anaphoric definiteness. In fact, the bare noun in Shan behaves much like the English article the. Though languages like Thai and Mandarin are similar to Shan in lacking overt definite articles and plural morphology, Shan does not pattern together with these two languages in that its demonstrative does not function as the primary marking of anaphoric definiteness. The pattern in Shan is likely to be found in other languages without articles, like Japanese and Russian.

This paper has also shown that the Consistency test does not seem able to distinguish what words count as determiners, so future work should address distinguishing between demonstratives and definite determiners. In Mandarin and Thai, the demonstrative counts as the determiner denoting ι∗, so the demonstrative is obligatory in expressing this meaning. I argue that in Shan the demonstrative does not count as a determiner ι∗, so a bare noun can type shift using ι∗. It seems, then, that the anaphoric definite, ι∗, could be included as one of the available type shifting operations.

This work in conjunction with the work by [11], [8], and [7] brings up the connection between form and meaning. In Mandarin, Thai, and German there seems to be a connection between the obligatory use of a strong determiner/demonstrative and the need for an anaphoric index in the meaning. In Shan, that connection is unidirectional: if there is a demonstrative there must be an anaphoric index, but the lack of a demonstrative does not mean there is no anaphora involved. We might then wonder if we want to say there are two covert ι’s in this language. The importance of separating them is apparent in contexts where their meanings are different. In German, it is possible to see an overt contrast between the unique and anaphoric reading, as in (26).
Two definite articles in German (11: 268)

Wenn [ein ausländischer Präsident]$_1$ [Barack Obama]$_2$ im
weizHaus besuch, wird vom$_1$ / von dem$_2$ Präsidenten eine
Rede gehalten

‘When a foreign president visits Barack Obama in the White House, the
president gives a speech.’

The English translation is also ambiguous, as is the Shan version. This am-
biguity must come from differences in the semantic denotations, which could
correspond to $i$ and $i'$. Without some sort of distinction we cannot explain why
such examples are ambiguous. The goal of investigating data of this sort is to
identify which features to model in order to capture the range of expressions
of definiteness across languages. Using these different type shifters is one way
we can do this. It opens the question: how many type-shifters do we need to
account for definiteness? Future work would be to integrate this analysis into a
complete analysis of the interpretation of Shan nouns and further compare with
other languages.

References

1. Cheng, Lisa Lai-Shan and Rint Sybesma: Bare and not-so-bare nouns and the
2. Chierchia, Gennaro: Reference to kinds across language. Natural language se-
manics. 6, 339–405 (1998)
3. Dayal, Veneeta: Number marking and (in) definiteness in kind terms. Linguis-
4. Deal, Amy Rose, and Julia Nee: Bare nouns, number, and definiteness in Teoti-
5. Hawkins, John A.: Definiteness and indefiniteness: a study in reference and
der zeitgenössischen Forschung, ed. by A. von Stechow and D. Wunderlich,
Berlin: de Gruyter. (1991)
7. Jenks, Peter: Articulated definiteness without articles. Linguistic Inquiry
8. Jenks, Peter: Two kinds of definites in numeral classifier languages. Semantics
and Linguistic Theory (SALT) 25, ed. by Sarah DAntonio, Mary Moroney, and
Carol-Rose Little, 103-124, LSA and CLC Publications. (2015)
10. Piriyawiboont, Nattaya: Classifiers and Determiner-less Languages: The Case
11. Schwarz, Floraian: Two types of definites in natural language. University of
Massachusetts Amherst. (2009)