Imperfect Intricacies: the distribution of the two imperfective markers in Gisible Anii
Deborah Morton
The Ohio State University
ACAL 43 Presentation
March X, 2012

1. Introduction and research question
Anii is a Kwa (Ghana-Togo Mountain) language spoken along the border between Togo and Benin in West Africa, about 150 miles north of the coast, by about 45,900 speakers (Lewis 2009). There are at least four major dialect groups in Anii, which are quite different from each other (Tompkins and Kluge 2009), but this project focuses on the dialect spoken in and around the largest village, Bassila. This dialect is called Gisible, and has an estimated 10,000-12,000 speakers. The data used here was collected from native speakers of Gisible Anii in Bassila, Benin in 2009 and 2011.

In previous research (Morton forthcoming), I have described and analyzed the semantics of Gisible Anii verb clauses without tense or aspect markers. I determined that such clauses cannot have imperfective interpretation. Instead, imperfective clauses (a cross-linguistic category encompassing progressive and habitual interpretation) in Gisible Anii must be marked by one of two aspect markers, /tɩ/ or /na/. The first type of imperfective clause I encountered is marked with the marker /tɩ/, as illustrated in (1):

(1)  Context: What is your brother doing right now?
    ə ti  lee ntimá
    he IMPF do  CL.F.work
    He is working

Not all imperfective clauses are marked with /tɩ/. For example, when there is an object focus marker in a sentence, the imperfective marker is not /tɩ/, but /na/, as in (2). The fronting of the focused constituent is optional, though preferred:

(2)  Context: what is the child breaking?
    nsi lá ndʒi ə nə pi
    CL.F.egg OBJ.FOC.CL.F 3.SG IMPF break
    He/she is breaking an EGG

In the object-focused sentence in (2), the use of /tɩ/ would be ungrammatical. This presentation will examine the contexts in which /na/ must be used instead of /tɩ/ as the imperfective marker, and then examine several possible analyses of the data presented.

2.0 Where /tɩ/ and /na/ occur
This section lays out the data showing what types of contexts /na/ appears in, including several types of focused clauses, negative clauses, clauses with future time reference, and relative clauses.

---

1 Data is given in IPA transcription rather than orthography, since the orthography is still under development. The transcription is phonetic rather than phonemic. For example, the vowel in both imperfective markers (and personal pronouns) can change due to [ATR]-based vowel harmony, and that is transcribed in the examples in this talk.
2 Abbreviations used in this handout: AGR = Agreement (based on noun class), CL = Noun Class (Anii noun classes are identified by letter), FOC = Focus, IMPF = Imperfective, OBJ = Object, PL = Plural, POSS = Possessive, PST = Past, REL = Relativizer, SG = Singular. Also, phonetic tone markings are given, with an accent meaning high tone and the lack of accent meaning low tone. Downstep is represented by a superscripted exclamation point.
2.1 Focus
This section illustrates that /na/, not /t/ /ɩ/, must be used in imperfective clauses with object, subject and contrastive verb focus.

2.1.1 Object focus
As shown in (2) above, /na/ is the preferred imperfective marker for sentences with object focus. A further example of this type of clause comes from content questions, which obligatorily contain object focus markers. Note that (3b) is the preferred response to (3a) unless there is a situation that requires subject focus on the response (discussed further below):

(3) a. Context: beginning a conversation.

mó nɔ akunůnɔ  a  na/*ti leed?  
what  OBJFOC your.SG.CL.A.younger.brother  AGR.CL.A IMPF  do
What is your younger brother doing?

b. a  t/place na pempene  áŋ'kú
he IMPF clean/straighten his.CL.Froom
He is cleaning his room.

In (3a), the object focus marker is obligatory, and /na/ must be used (/t/ would be ungrammatical). In (3b), however, there is no object focus, and no focus marking. From context, the pragmatic focus of (3b) is on the verb, though it is not contrastive verb focus, which will be discussed below. The use of /na/ in (3b) would require a subject focus interpretation, and is thus infelicitous as a response to (3a).

2.1.2 Subject focus
In clauses with subject focus, the only grammatical indication that the subject is in focus is the choice of imperfective marker (there are no subject focus markers), as shown in (4b):

(4) a. Context: What is happening?

a  ti tsɔ goyá ŋ ni
he IMPF go market to/in
He is going to the market

b. Context: Who is going to the market?

a  na tsɔ goyá ŋ ni
he IMPF go market to/in
HE is going to the market

2.1.3 ‘Only’ clauses
/na/ must also be used in other types of clauses with subject or object focus, such as clauses containing the word -ndɔndɔŋ, meaning ‘alone’ or ‘only’. Compare (5a), with sentence focus, to (5b), where there is subject focus on the girl, and (5c) where there is object focus on the oranges:

(5) a. Context: Describing a picture

upigi a  t/place na fi ikutu
CL.A.girl  AGR.CL.A IMPF  buy CL.W.oranges
A/t the girl is buying oranges.
Thus, we can see that /na/ is required in clauses with subject or object focus. It is also required in clauses with contrastive verb focus.

### 2.1.4 Contrastive verb focus

Contrastive verb focus is usually marked by reduplication. Reduplicated forms use /na/ in the imperfective. Examples (6) and (7) were elicited following Fiedler (n.d.), though the contexts are my own:

(6) Context: A business man wants to know if a truckload of merchandise he is shipping has left yet, so he asks if the drivers are driving. The response is:

```
aái, bá  nò/*tí toño tòño
no they IMPF load load

No, they are LOADING.
```

There is also a second kind of construction that can express contrastive verb focus, which involves nominalization and object focus:

(7) a. Context: A wife is at home, and her husband calls and asks if she is doing laundry:

```
o tí foga  aa
you sg IMPF do laundry QUEST

Are you doing laundry?
```

b. aái tìkpáll  na  ǹ ná/*tí kpal

```
no cl.D.ironing FOC.cl.D I IMPF iron(verb)

No, I am IRONING. (or, more literally, “no, it is ironing I am ironing”)
```

So, /na/ appears in clauses with subject, object or contrastive verb focus. Any clause containing an object marker or a reduplicated verb is ungrammatical if /tu/ is present.

### 2.2 Irrealis forms

Both negative clauses and clauses with future time reference (among other forms) are formed using the same structure. This structure is a verb clause form only used in arguably irrealis situations, which in its basic form probably indicates a wish, or an immediate future happening (investigation is ongoing regarding the exact meaning of this construction)

Clauses with their rough translations are given in (8) in order to illustrate how this structure works. (8a) is the base form (immediate future), (8b) is a negative clause in the perfective, and (8c) is the

---

3 The object focus marker in some noun classes is /na/, but this is unrelated to the imperfective /na/.
most commonly used future construction. These forms use a different set of first- and second-person pronouns from other clauses in Gisida:

(8) a. má ɲón
   I write
   I am about to write/May I write (wish)

b. kâ má ɲón ná
   NEG I write NEG
   I did not write

c. ñ tô má ɲón
   I FUT I write
   I will write

The imperfective in some irrealis constructions is illustrated below.

2.2.1 Negation
As shown above, negation in Gisida Anii is formed by adding the marker k(\(V\)) (the vowel varies or deletes depending on context) before the verb phrase, and the marker ná after the verb phrase. (9b) and (9c) are intended to be responses to (9a), and (9b) illustrates that in the imperfective, negated clauses must have the marker /ná/:

(9) a. Context: what is happening right now?
   upi a t� ðمض ðku a
   CL.A.child he/she IMPF clean room QUEST
   Is the child cleaning the room?

b. upi k a ná ðمض ðku ' ná
   CL.A.child NEG he/she IMPF clean room NEG
   The child is not cleaning the room

c. *upi k a t� ðمض ðku ' ná
   CL.A.child NEG he/she IMPF clean room NEG
   Intended meaning: the child is not cleaning the room

Note that the sentence in (9c) is grammatically incorrect in any context. The marker /t�/ cannot be used in negative clauses.

2.2.2 Clauses with future time reference
The future imperfective is indicated by the future marker t\(V\) (the vowel here varies according to phonological context) followed by /ná/. It is unclear why the /ná/ in such clauses surfaces with a long vowel, but phonological analysis is ongoing. (10b) illustrates that /t�/ is ungrammatical in clauses with future time reference:

(10) a. Context: What will he be doing tomorrow when we arrive?
   a ta a náa ɲón abɔ
   he FUT he IMPF write CL.T.letters
   He will be writing letters.
b. Context: What will he be doing tomorrow when we arrive?
*a tə a tə ɲɔn abə
he Fut he Impf write cl.T.letters
Intended interpretation: He will be writing letters.

Thus, it has been shown that /na/ must be used in negative clauses and clauses with future time reference. /na/ also must be used in hypothetical situations, another irrealis context.

2.2.3 Hypothetical situations
The clause in (11) can only be said in contexts where the speaker is not changing, i.e. in discussing hypothetical situations. /tɨ/ would be ungrammatical here:

(11) Context: making an excuse for why the speaker is not currently changing
ń jɔ waa mà náa/*tɨ fùba ...
I know that I Impf change
I wanted to be changing...

An example from a text (an unpublished essay by Rahinatou Issa) about children going to school, describing conditional action, is in (12). The only indication of the ‘if’ meaning given in the translation is the use of /náa/ (again, the vowel is long for unknown reasons) instead of /tɨ/:

(12) Context: In a story about the habitual activities of school children
bá náa tə mídi, bādə pə afäl a tɨ dʒi ʊdʒi.  
they Impf leave noon cl.Y.those.ones AGR.C.LY come home to pst eat cl.E.food
If they leave at noon, they then come home to eat.

Further research will investigate other possible irrealis contexts in order to further test the hypothesis that /na/ rather than /tɨ/ is used as the imperfective marker in irrealis contexts.

2.3 Subordinate clauses
The distribution of /tɨ/ and /na/ in subordinate clauses is also of interest. /tɨ/ occurs in complement clauses that begin with the complementizer waa, ‘that’, generally complements of verbs such as lə, ‘say’ or fajú, ‘think’. Relative clauses, on the other hand, have /na/ as imperfective marker. Other types of subordinate clauses are also discussed.

2.3.1 Complement clauses with waa, ‘that’
Imperfective complement clauses with waa, ‘that’, contain /tɨ/ as their imperfective marker:

(13) Context: (discussing events of yesterday) what did Jean say Marie was doing when I called?
ə lə waa a tɨ rə
he/she say that he/she Impf dance
He said that she was coming

It is not yet known whether these types of clauses can have /na/ instead of /tɨ/ if they have subject, object or contrastive verb focus, as that data has not yet been elicited.

4 /tɨ/ with a high tone is different from /tɨ/, the imperfective marker, which has a low tone. The high toned /tɨ/ has not yet been fully analyzed, but appears to be a relative past marker.
2.3.2 Relative clauses

Many clauses in Anii end with the marker *ma*, which is a relativizer of some kind, though further research into its meaning is needed. One use of this marker is in relative clauses. (14a) shows that /na/ is used to mark imperfective in relative clauses, and (14b) illustrates that /tu/ is ungrammatical in this context:

(14) a. Context: which child is good?
   upi  n’dé  á  na  sara  ma  a  tsiŋ
   CL.A.child  CL.A.that  AGR.CL.A  IMPF  walk  REL  AGR.CL.A  be.good
   The child who is walking is good.

b. Context: which child is good?
   *upi  ndé  á  na  sara  ma  a  tsiŋ
   CL.A.child  CL.A.that  AGR.CL.A  IMPF  walk  REL  AGR.CL.A  be.good
   Intended interpretation: The child who is walking is good.

In (14), the relative clause is a subject modifier, but /na/ must be used for relative clauses in any syntactic position. (15) provides an example with the relative clause as an object modifier, with (15b) illustrating that /tu/ is ungrammatical in object relative clauses:

(15) a. Context: which child is that?
   a  lee  upi  ndé  ń  ná  ki  ma
   AGR.CL.A  do  CL.A.child  AGR.CL.A.that  I  IMPF  hit  REL
   That is the child whom I was hitting.

b. Context: which child is that?
   *a  lee  upi  n’dé  ń  tu  ki  ma
   AGR.CL.A  do  CL.A.child  AGR.CL.A.that  I  IMPF  hit  REL
   That is the child whom I was hitting.

Thus, it can be seen that /na/ is the imperfective marker that must be used in relative clauses.

2.3.3 Other clauses containing the relativizer *ma*

The relativizer *ma* is also used in non-relative subordinate clauses, where it is usually translated as ‘when’, or ‘since’. In non-relative clauses of this type, /tu/ is used to indicate imperfectivity. The example in (16) is from an unpublished manuscript (Djaboutouboutou Seidi 2004):

(16) Context: From a story describing the events of a bus journey.
   Gi  saŋ  kɔɔ  tu  kpa  doodoo  budu  budǝŋ  ma,  na  gi  saŋ  kɔɔ
   we  more  again  IMPF  arrive  far  CL.G.places  CL.G.some  REL
   and  we  more  again
   get.down  to  eat  CL.E.food
   When we would arrive again at various places, we would get down again and eat.

Thus, it appears that the use of /na/ in subordinate clauses is limited to relative clauses, i.e. clauses which serve to focus attention on the part of the sentence they are modifying.

2.4 Section summary

The data presented in this section have illustrated the following distribution for the two imperfective markers of Gisida Anii, which can be seen to be in complementary distribution:
<table>
<thead>
<tr>
<th></th>
<th>/t/</th>
<th>/na/</th>
</tr>
</thead>
<tbody>
<tr>
<td>object focus</td>
<td>no</td>
<td>yes</td>
</tr>
<tr>
<td>subject focus</td>
<td>no</td>
<td>yes</td>
</tr>
<tr>
<td>contrastive verb focus</td>
<td>no</td>
<td>yes</td>
</tr>
<tr>
<td>non-contrastive verb focus</td>
<td>yes</td>
<td>no</td>
</tr>
<tr>
<td>sentence focus</td>
<td>yes</td>
<td>no</td>
</tr>
<tr>
<td>negation</td>
<td>no</td>
<td>yes</td>
</tr>
<tr>
<td>future</td>
<td>no</td>
<td>yes</td>
</tr>
<tr>
<td>hypotheticals</td>
<td>no</td>
<td>yes</td>
</tr>
<tr>
<td>‘that’ complement clauses</td>
<td>yes</td>
<td>no</td>
</tr>
<tr>
<td>relative clauses</td>
<td>no</td>
<td>yes</td>
</tr>
<tr>
<td>‘since/when’ subordinate clauses</td>
<td>yes</td>
<td>no</td>
</tr>
</tbody>
</table>

In other words, /t/ is used in clauses with non-contrastive verb focus and sentence focus, as well as in ‘that’ complement clauses (with verbs of thinking or saying) and ‘since/when’ subordinate clauses. /na/, on the other hand, is used with object, subject and contrastive verb focus, and in negation, clauses with future time reference, hypotheticals and relative clauses.

3 Related phenomena in other languages
The literature provides numerous descriptions and/or analyses of West African languages in which certain morphemes occur only in certain syntactic or semantic contexts:

Fiedler and Schwartz (2009) discuss how in Lelemi, a Ghana-Togo Mountain language spoken in Ghana and Togo, the verb paradigm used in focus constructions is similar to that used in relative clauses, though only in “subject related constructions”, i.e. relative clauses with the subject as the head, wh-questions querying the subject and subject or sentence focus (which both include subjects in their domains). Lelemi also appears to have two types of subject pronouns, though in the “relative paradigm” this is called a disjunctive pronoun, and elsewhere it is considered a prefix.

Cover (2010) illustrates that in Badiaranke, a Senegalese language, there are two past markers, one used in irrealis contexts and one in realis contexts.

Boadi (2008) claims that the forms of the markers for past meaning and perfect meaning are change between positive and negative sentences in Akan.

Jaggar (2006), among others, claims that Hausa has two perfective paradigms, one that is used in “foregrounded narrative sequences” (100) and “wh-interrogatives, declarative focus constructions, and relative clauses” (101).

Frajzyngier (2004) provides data from many Cameroonian, Nigerian and Chadian languages to argue that tense-aspect systems in this area can certainly code pragmatic function (perhaps along the lines of pragmatically dependent clauses as opposed to pragmatically independent clauses), as well as temporal and aspectual meaning, but that the exact nature of that pragmatic encoding is language-specific.
Jungraithmayr (1994, quoted in Frajzyngier 2004) claims that aspectual markers in the Chadic languages Mubi, Bidiya and Dangaleat are different in semantically independent and semantically dependent clauses, and that fronting can also cause a change in aspectual marking.

Also, Gengbe, a Gbe language spoken in Togo, has one progressive form in present positive clauses and another elsewhere (Winford and Migge 2007).

Additionally, there are some hints that similar phenomena may occur in non-West African languages:

Demuth (1995) mentions that in Sesotho, a southern African (Bantu) language, both relative clauses and cleft questions (which are all content questions that question the subject, and could possibly be analyzed as focused), the same relativizer is used.

In addition, Bricker (1979) noted that in Yucatec Maya, focus constructions, content questions and relative clauses all pattern together in the use of a special verb form when the agent of a transitive predicate is focused.

Many other languages have been claimed to have different tense-aspect or pronoun forms depending on focus, irrealis interpretation, or in some cases, pragmatics or clause structure. However, I have not found any mention in the literature of a language where focused and irrealis contexts are marked in the same way.

4 Conclusions

From the data in this paper, it can be seen that there are two general cases in which /na/ is used instead of /tɩ/ to mark imperfective.

—Focus-y clauses, including clauses with subject, object and contrastive verb focus, as well as possibly relative clauses.
—Irrealis-y clauses, including negative clauses, clauses with future time reference, and certain types of hypothetical clauses. These types of clauses also use a different set of pronouns from other clauses in the language.

It was initially thought that the use of /tɩ/ and /na/ might be related to clause subordination, but that does not appear to be the case, as non-relative subordinate clauses take /tɩ/ as their imperfective marker, as do many matrix clauses.

At least part of the explanation for the Gisida data presented here could be that certain types of focused clauses take /na/ as their imperfective markers. Conceptually, relative clauses serve a similar purpose as focused clauses in the sense that they may make the constituent they modify more prominent. Exactly what the connection is between relative and focused clauses is, however, not yet fully clear, and additionally it is not clear why clauses with non-contrastive verb focus (and sentence focus) take /tɩ/ instead of /na/.

In addition, the clauses I have presented as irrealis are not focused but do use /na/. These clauses also use a different set of pronouns that is not found in focused clauses, or indeed in any non-irrealis contexts. Further research is needed here, however, to determine if all irrealis contexts behave in this way (for example, conditionals and counterfactuals have not yet been investigated).
Future research will continue to investigate the question of irrealis contexts so that data can be presented more clearly. In addition, an analysis that explains the connection between focused and irrealis contexts that could lead to a comprehensive analysis of the distribution of /na/ and /tɩ/ in Gisuda Anii will be sought.

References