THE CONCEPT OF TIME AND ITS EXPRESSION
IN THE TANDROY DIALECT OF MALAGASY

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ABSTRACT   This paper investigates the Tandroy concept of time, focusing on their ways of recognizing time. The Tandroy language is a Malagasy dialect, spoken in the southern part of Madagascar, that belongs to the Austronesian family. The Tandroy live in a non-literate society that traditionally puts little value on written materials. They educate their children, inherit their traditions, and impart their wisdom through oral traditions passed down from generation to generation. My research on the Tandroy reveals that its speakers keep track of time according to natural phenomena such as diurnal rotation, animal behaviors, agricultural cycles, and the daily routines of their society. For example, *Mihilaña andro*, which literally means 'The sun declines', indicates approximately one o'clock in the afternoon, and such expressions, used in conversation when talking about time, can be found for all the hours of the day, corresponding roughly to the 24 hours as counted in modern time. This way of conceiving of and expressing time is used in everyday life and also appears in their folktales.

Key Words: Malagasy; Tandroy; Time expressions; Traditional calendar.

INTRODUCTION

   What is time? On the one hand, time is a part of our everyday consciousness. On the other hand, it is a great mystery in that we cannot touch or access it directly. The philosophical question of 'What is time?' has therefore been at the center of attention of every scientific field in recorded history.

   Physical time is the notion that we regard as a time series a line that stretches from our ancient ancestors to our future descendants. From this viewpoint, our existence today is historically just a single dot on the timeline, which continues infinitely from the past into the future.

   Biological time, from one particular perspective, is the notion that we regard our course of life as an incarnation, which is based on life phenomena such as birth, growth, deterioration, death, lying in a tomb, and then repeating the process again after being reincarnated in another body. From this viewpoint, life may be considered to be a circular ring, and we exist at a point on this ring.

   Language functions as a medium to structuralize time, as all languages have a means by which to describe time references and temporal relations. References to this concept differ according to people's lifestyles, natural environments, social systems, historical backgrounds, etc. Although time is untouchable, we can sense its current at every moment.

   In this paper, I examine the concept of time of the Tandroy who are an agri-cultural and pastoral people in the southern part of Madagascar. After briefly describing the Tandroy grammatical tenses and temporal adverbs, I will discuss

the system of counting the hours, days, months, and seasons. I will also describe traditional child-naming practices. The data analyzed in this study are drawn from field research that I conducted in Madagascar intermittently from 2006 to 2008.[1]

THE TANDROY DIALECT AND ITS SPEAKERS

Tandroy is a dialect of Malagasy, which belongs to the Western Indonesian subgroup of Austronesian languages (Vérin et al., 1969). It has approximately 500,000 speakers in Madagascar. The Tandroy people maintain a non-literate culture. The Tandroy, whose ethnic name means 'people of the thorn bush', live in the southernmost region of Madagascar (see Fig. 1), called Androy, the 'place of the thorn bush'.
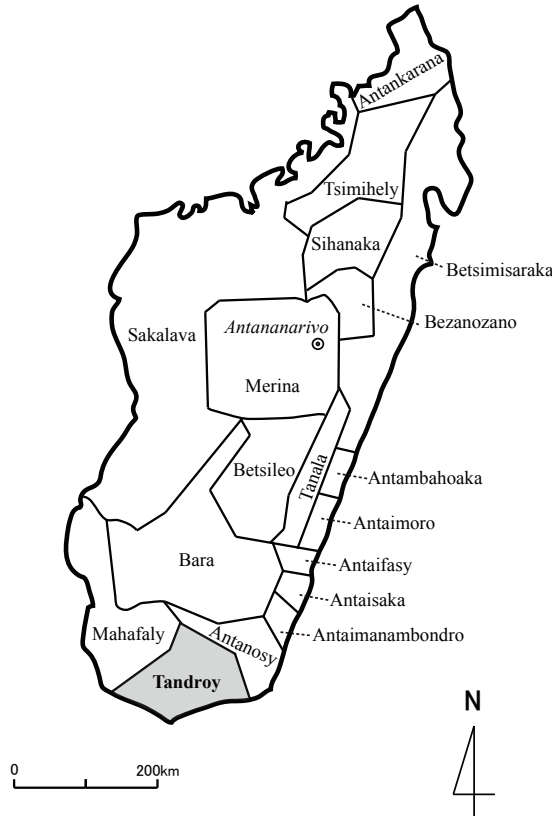

Fig. 1. Malagasy dialects and distribution.
Source: Dahl (1951), modified by author.

OVERVIEW OF THE MAJOR FEATURES OF THE TANDROY DIALECT

I. Sounds and Orthography

The following consonant sounds appear in the phonetic inventory of Tandroy. The orthography used in this paper follows standard Malagasy conventions. There are 31 consonants, p [p], b [b], t [t], d [d], k [k], g [g], ʔ [ʔ], mp [mp], mb [mb], nt [nt], nd [nd], nk [ŋk], ng [ŋg], f [f], v [v], s [s], z [z], h [h], r [r], ts [ts], j [dʒ], tr [ʈ], dr [ɖ], nts [nts], nj [nj], ntr [ɳʈ], ndr [ɳɖ], m [m], n [n], ñ [ŋ], l [l], and 4 vowels, a [a], e [e], i [i], o [u]. The word-final [i] is spelled *y* in the official orthography. ô [o] appears only in borrowed words such as *radiô* or vocative interjections such as '*ô!*' An apostrophe (') indicates that the word-final vowel of the precedent word is deleted. In this paper, the following abbreviations are used in the examples.

ACT	active verb formative
ADJ	adjective formative
PRE	present tense
PST	past tense
FUT	future tense
CAU	causative
IMP	imperative

II. Basic Morphosyntactic Characteristics of Tandroy

Before we proceed to a closer examination of the concept of time in Tandroy, some basic typological characteristics of Malagasy[2] should be noted in order to better understand the discussion in this paper. These characteristics are listed in (1) to (4). The examples are from Tandroy, the rules of which appear in many Malagasy dialects, although word-final syllables, lexical use, and the types of determiners are different.

(1) Basic word formation consists of a root with affixes, which are either prefixes, suffixes, infixes, or circumfixes.
   a. prefix: *mi-* (active verb formative) + *teny* 'language' > *miteny* 'speak'
   b. suffix: *vono* 'kill' + *-e* (passive verb formative) > *vonoe* 'be killed'
   c. infix: *io* 'this' + *-re-* (plural marker) > *ireo* 'these'
   d. circumfix: *sotro* 'spoon' + *i- -ana* (relative verb formative)
       > *isotroana* 'that I drink'

(2) Right-branching structure
   foto   ty   faty   ndaty
   origin   (of) the   death   human
   'origin of human death'

(3) VOS structure (verb-initial and subject-final)
   Miteny   teny   gasy   raho.
   speak   language   Malagasy   I
   'I speak the Malagasy language.'

(4) Predicate-initial structure
   Mpianatse   raho.
   student   I
   'I am a student.'

THE CONCEPT OF TIME IN TANDROY

I. Grammatical Tense Markers

Before we discuss the concept of time, we must review the Tandroy grammatical tense markers. This language distinguishes three tenses: past, present, and future. Verbs and adverbs realize these tenses with prefixes. The past and future tense markers, *n-* and *h-* respectively, replace word-initial *m-*, which is the present tense marker for active verbs. This is illustrated in example (5).

(5) a. *Mipay añombe raho.*
      M-i-pay   *añombe*   *raho.*
      PRE-ACT-search.for   cattle   I
      'I search for cattle.'

   b. *Nipay añombe raho.*
      N-i-pay   *añombe*   *raho.*
      PST-ACT-search.for   cattle   I
      'I searched for cattle.'

   c. *Hipay añombe raho.*
      H-i-pay   *añombe*   *raho.*
      FUT-ACT-search.for   cattle   I
      'I will search for cattle.'

One of the characteristics of Malagasy is that locative adverbs also distinguish two tenses: present/future and past. The former has no specific mark as in (6a) and the latter is indicated by the prefix *t-* as in (6b). Although *heto* in (6c), the form with the future tense marker *h-*, is grammatically correct, this form sounds slightly strange to the native speaker and is preferably replaced by *eto*, the present form, to express the future event, as in (6a). Notice that the locative interrogative *aia* 'where' is also prefixed by the past tense marker *t-*, as shown in (7).

(6) a. *Eto misy seza*.
   φ-Eto   m-isy   seza.
   PRE-here   PRE-exist   chair
   1) 'A chair is here. (Here is a chair.)'
   2) 'A chair will be here.
       (Someone will bring a chair and it will arrive here soon.)'

   b. *Teto nisy seza*.
   T-eto   n-isy   seza.
   PST-here   PST-exist   chair
   'A chair was here. (Here was a chair.)'

   c. *Heto hisy seza*.
   H-eto   h-isy   seza.
   FUT-here   FUT-exist   chair
   'A chair will be here.'

(7) a. *Mandeha aia?*
   M-an-leha   φ-aia?
   PRE-ACT-go   PRE/FUT-where
   'Where are (you) going? Where do (you) go?'

   b. *Boake aia?*
   Boake   t-aia?
   from   PST-where
   'Where were (you) from?'

II. Temporal Adverbs

   The temporal reference point of this language is the time at which a sentence is uttered. The moment of utterance (i.e., now) is used as a base point, and temporal adverbs such as 'today' and 'tonight' are expressed in two ways, either past or future tense. For example, 'today' has two forms, *androañe* and *añito*. *Androañe* comes before *(i)zao* "now" and *añito* comes after *(i)za*, as illustrated in (8). The timeline as well as the temporal adverbs in Tandroy are shown in Fig. 2.

(8) a. *Tena   n-angatsiaka   androañe*.
   very   PST-cold   today
   'It was very cold today.'

   b. *Miasa   raho   añito*.
   work   I   today
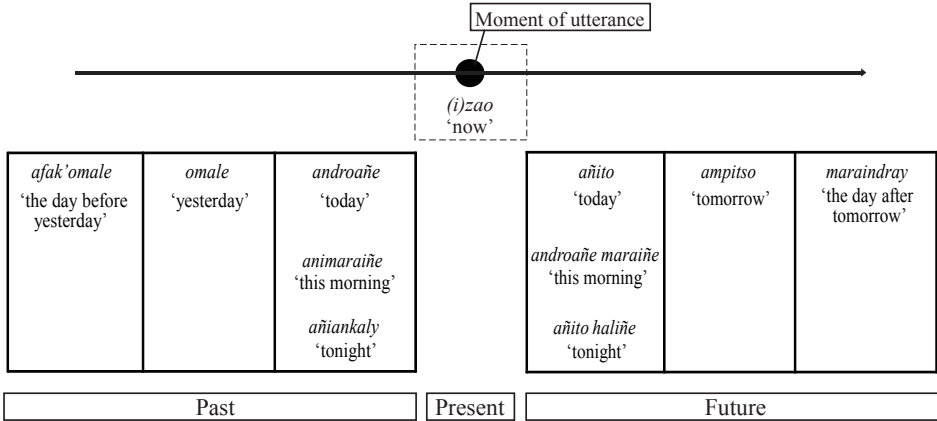   'I work today (from now on).'

Fig. 2. Timeline.

With regard to this distinction, in the Merina dialect of Malagasy, which is spoken in and around the capital, there are two interrogatives: *oviana* 'when' and *rahoviana* 'when' to ask about past and future events, respectively.

III. The Tandroy Concept of Time

I will briefly describe their way of living in order to enable an understanding of their concept of time. Located under the Tropic of Capricorn, the area in which the Tandroy live has a dry climate and suffers from chronic water shortages caused by droughts. It takes one or two days for residents to go and fetch a day's supply of water from a well. The Tandroy are an agricultural and pastoral people: they place special value on cattle and cultivate mainly beans and corn. Fig. 3 shows an approximate residential area of the Tandroy.

Without electricity or a means of a modern communication, how do the Tandroy arrange their appointments or meetings? First, a solar clock is used as a means of time management. However, solar clocks are limited in some places and are not available to every family. My research revealed that Tandroy society counts time according to natural phenomena and daily routines; that is, they apply physical and biological time. The expressions in (9) are used and shared as common understandings in the Tandroy speech community. These expressions are examples from speakers in Ambovombe (see Fig. 3). One sentence using this kind of time expression is given in (10). While there are two expressions to indicate the time at two o'clock and four o'clock in the morning, there are no expressions for seven o'clock and eleven o'clock in the morning or for two o'clock in the afternoon, and the same expression is used for both three and four o'clock in the afternoon.
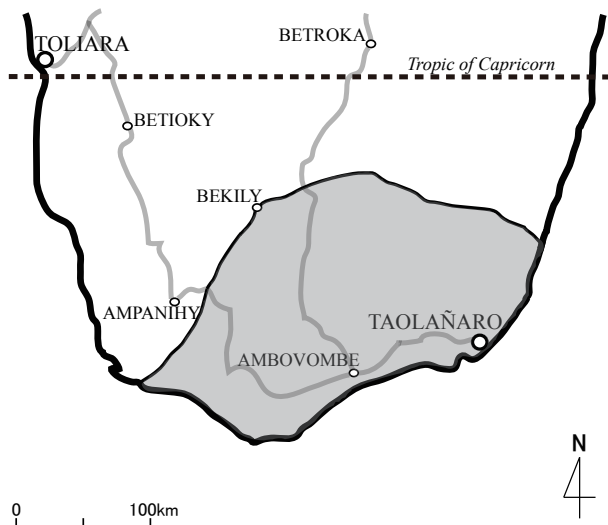
Fig. 3. Residential area of the Tandroy (Area highlighted in gray).
Source: Valverde and Honoré (2004), modified by author.

(9) 00h 1) *Misasak'ale*
          Misasake-ale
          middle-night
          'midnight'

       2) *Matokalembey*
          Matoka-ale-bey
          middle-night-very
          'midnight'

   01h   *Mañeno sahoñe*.
          M-an-teno   *sahoñe*.
          PRE-ACT-croak   frog
          'A frog croaks.'

   02h 1) *Mañeno akoho voalohaʔe*.
          M-an-teno   *akoho*   *voalohaʔe*.
          PRE-ACT-croak   cock   first time
          'A cock crows for the first time.'

       2) *Mañeno akoho mavande*.
          M-an-teno   *akoho*   *m-an-vande*.
          PRE-ACT-croak   cock   PRE-ACT-tell.a.lie
          'A cock lies.'
          N.B. The verb *mavande* 'tell a lie' is used here as a substantive.

03h   *Mañeno akoho faharoʔe.*
         M-an-teno   akoho   faharoʔe.
         PRE-ACT-croak   cock   second time
         'A cock crows for the second time.'

04h 1) *Tera-panjiry.*
         bear-Fanjiry (name of a star, probably the Lucifer)
         '*Fanjiry* arises in the sky.'

     2) *Mañeno akoho fahatelo.*
         (*fañinteloñe* can be used instead of *fahatelo.*)
         M-an-teno   akoho   fahatelo
         PRE-ACT-croak   cock   third time.
         'Cock crows for the third time.'

05h   *Mangararak'atiñana.*
         M-an-harake   atiñana.
         PRE-ACT-lighten   west
         'The west side is lightening. (Lit.)'
         N.B. This expression is only used for the first light of the day.

06h   *Mifoha ndaty.*
         M-i-foha   ndaty.
         PRE-ACT-wake.up   man
         'Man wakes up.'

07h   —

08h   *Mivavatse añombe.*
         M-i-vavatse   añombe.
         PRE-ACT-go.out   cattle
         'The cattle go for a walk.'

09h   *Mafana voho.*
         Ma-fana   voho.
         ADJ-hot   back
         'One's back is hot.'

10h   *Mitroatse mpiava.*
         M-i-troatse   mpiava.
         PRE-ACT-take.a.rest   farmer
         'Farmers take a rest.'

11h   —

12h   *Mandia talinjo.*
        M-an-lia   talinjo.
        PRE-ACT-step   shade
        '(Someone) steps on (his) shade.'
        N.B. The subject is omitted in this sentence.

13h   *Mihilaña andro.*
        M-i-hilaña   andro.
        PRE-ACT-decline   the.sun
        'The sun declines.'

14h   —

15h   *Mandisa ampela.*
        M-an-lisa   ampela.
        PRE-ACT-grind (the food)   woman
        'Women grind the food.'

16h   *Mandisa ampela.*
        M-an-lisa   ampela.
        PRE-ACT-grind   woman
        'Women grind the food.'

17h   *Avy   añombe.*
        come   cattle
        'Cattle return home.'

18h   *Mizilike añombe.*
        M-i-zilike   añombe.
        PRE-ACT-enter   cattle
        'Cattle enter the corrals.'

19h   *Mihinañe ty ndaty.*
        M-i-hinañe   ty   ndaty.
        PRE-ACT-eat   the   man
        'People eat the meal.'

20h   *Mandafe tihy ndaty.*
        M-an-lafe   tihy   ndaty.
        PRE-ACT-spread   mat   man
        'A man spreads the mat.'

21h   *Misaondroro.*
        M-i-saondroro.
        PRE-ACT-fall.asleep
        'sleeping'

22h   *Mivalike ndaty*.
        M-i-valike   ndaty.
        PRE-ACT-roll.over   man
        'A man rolls over.'

23h   *Etsandroro*.
        fall.into.deep.sleep
        'Falling into deep sleep.'

(10) *Misy fivoriañe-ntika naho mihilaña andro*.
      M-isy   fivoriañe-ntika   naho   mihilaña andro.
      PRE-exist   conference-our   when   13h
      'There is our meeting at one o'clock.'

According to an informant, given the information in (10), people gather at the meeting place, and the meeting is held at approximately one o'clock without any problems. Section IV shows the use of the concept of time in folktales.

This way of measuring time using celestial motion or natural phenomena may closely relate to the fact that, instead of using subjective expressions such as 'right' or 'left', the Tandroy use objective directions such as 'north' or 'south' to locate an object, even if it is very near to the speaker. A detailed survey of directions and space terms is a future topic of my research.

IV. The Concept of Time Observed in Folktales

Andrianañahare nandranto

Lehe nandranto ty Andrianañahare, nibababababa ty oselahy.
   Lehe n-an-ranto   ty   Andrianañahare, n-i-bababababa ty selahy.
   then PST-ACT-sleep.with.girl the God   PST-ACT-cry the goat

Nifoha ty Andrianañahare am'i sahe i oselahy ʔy, nañavelo.
   N-i-foha   ty   Andrianañahare   am'i   sahe
   PST-ACT-wake.up   the   God   at.the   copulation
   i   oselahy   ʔy,   n-an-havelo.
   the   goat   the   PST-ACT-go.out

*Le mbe **matokalembey**. Ie nibalike ka reke finoha i akoho*
   *Le   mbe   **matokalembey***.
   then   but   midnight
   Ie   n-i-balike   ka   reke   finoha   i   akoho
   when   ACT-PST-roll.over (interjection) he   waking.up the   cock

'Izaho rañandria', hoe ty akoho, 'ehe mikekeo am'i fanampoñe y raho',
  'Izaho   rañandria',   hoe   ty   akoho,
  me   Sir.   said   the   cock
  'ehe   m-i-kekeo   am'i fanampoñe   y   raho',
  ah   PRE-ACT-cry   with.the.intention   the   I

*mbe tsy ie. '**kekeon'akoholahy mavande**', hoe re, i fanampoñe Ɂy.*
  mbe   tsy   ie.   'kekeon'akoholahy   m-an-vande'
  but   not   yes   cock-a-doodle-doo.cock   PRE-ACT-lie
  hoe   re,   i   fanampoñe   Ɂy.
  said   he   the   intention   the

*Mikekeo raho añivo eo, mbe tsy ie. 'Ie ty **fañinteloñe**', hoe re ama….*
  M-i-kekeo   raho   añivo   eo,   mbe   tsy   ie.
  PRE-ACT-cry   I   middle   here   but   not   yes
  *'Ie   ty   **fañinteloñe**',   hoe   re   ama….*
  then   the   third time   said   he   well…

Vaho ie. Mifohaza rehe mpanjaka naho am'izay.
  Vaho   ie.   M-i-foha-za   rehe   mpanjaka   naho   am'izay.
  well   yes   PRE-ACT-wake.up-IMP   you   king   then   now

Izao ahavia o akoho o an-kazomanga ey o.
  Izao   aha-via   o   akoho   o   an-kazomanga   ey   o.
  that's because   CAU-come   the   cock   the   at-Hazomanga   there   the

Tsy nahavia i ose an-kazomanga ey o, namoha
  Tsy   n-aha-avia   i   ose   an-kazomanga   ey   o,   n-an-foha
  not   PST-CAU-come   the   goat   at-Hazomanga   there   the,   PST-ACT-wake.up

*an'Andrianañahare **matokalembey** ama t'ie nandranto.*
  *an'Andrianañahare   **matokalembey**   ama t'ie   n-an-ranto.*
  at.God   midnight   while   PST-ACT-sleep.with.girl

God Looked for a Girl

Once upon a time, God was sleeping with a girl. A goat bleated. God awoke to the sound of copulation and went out. It was, however, **midnight**. When he rolled over in his sleep, he woke up because of the cry of the goat.

'It is me, sir,' the cock said, 'I cried cock-a-doodle-doo intentionally, but it is not the right time (to wake up).' '**The cock lies** (It is two o'clock),' he said with kind intention. 'I cried at **midnight**, but it was not the truth.' **The third time** (at four o'clock), the cock said, 'It is the truth. It is time to wake up. Sir, God, please wake up.' Because of this, it is permitted to bring the cock to the *Hazo-manga* (a kind of purification in the local religion),[3] but not the goat, because it disturbed God when he was sleeping with a girl at **midnight**.

The goat in the story disturbed the sleep of God, and it made God angry. The cock, however, kindly informed God of the time. Since this event, the goat has been prohibited from *Hazomanga*, but the cock and cow are admitted. In practical social life, it is a living and well-known custom for the Tandroy to bring mostly cows as well as cocks to the ritual, and then purify themselves with the blood of the animals before *Hazomanga* when, for example, they suffer from disease or break a taboo.

The boldface words highlight the use of time expressions. This folktale is a reconstruction based on the collection of the French pastor Benolo (1989). I conducted the translation and interpretation of the folktale with the help of a native Tandroy speaker. The expressions used in this folktale are slightly different from the time expressions shown in (9), although they have the same meaning. For example, *Mañeno akoho mavande*, 'A cock lies,' in (9), which indicates two o'clock, is expressed as *kekeon'akoholahy mavande*, literally 'cock-a-doodle-doo of the cock lies,' in the folktales due to the Tandroy dialectal variations. It should also be noted that some of the expressions, such as *Maneno sahoñe*, 'Frog croaks (one o'clock in the morning),' is only used in areas where there is a body of water.

When I first heard these time expressions, I was not sure whether they were still used to describe the 24 hours, especially after watches and clocks were introduced to the region. However, the interviews that I conducted in the field confirmed that the Tandroy people in the isolated areas certainly use these expressions with some slight variations to indicate the time. The expressions are unique to Tandroy residential areas and are not comprehensible in other ethnic regions.

V. Days, Months, Seasons, and Child-naming Practices

1. Days of the week

The Tandroy days of the week, summarized in Table 1, resort to terms borrowed from Arabic. In daily conversation, French words are often used in urban areas. The Arabic article al- appears in standard Malagasy (e.g., *alatsinainy, alarobia, alakamisy*); however, it is often dropped in the Tandroy pronunciation of words.

Table 1. Days of the week

Days	Expression
Monday	*tinainy*
Tuesday	*talata*
Wednesday	*larobia*
Thursday	*kamisy*
Friday	*joma*
Saturday	*sabotse*
Sunday	*lahady*

2. Months

The majority of the lexical nomenclature for months is of Sanskrit origin, reportedly introduced via old Javanese. Each Malagasy dialect has its own expression that corresponds to the agricultural cycle in their society in a year. Therefore, although the same expression is observed, the terms correspond to different months among the dialects depending on the cultivation period of the region based on the natural or geographical conditions of the society. Additionally, as the division of the year largely depends on the cultivation cycle, and farming and hunting comprise the basis of the Tandroy society, as mentioned earlier, the duration of each month is not absolute. *Valasira*, January in Tandroy, means the first month of the year. This word refers to March to April in Tanala (Beaujard, 1998). *Hatsiha* corresponds to February. *Hiahia*, which corresponds to March, is a reduplicated form of *hia*, 'infertile, sterile'; thus, it may be assumed that this month is not suitable for harvest. *Volamaka* and *Tatakampemba* correspond to April. *Tatakampemba* means 'to cut the grain of millet'. *Saka-* in Sakamasay, used for 'June', and *Sakavey*, used for 'July', indicates 'matured'. *Volambita* for August means 'the last month', which indicates the end of the period of agricultural cultivation. Smells are also relevant to the terms for months: *Asaramanty*, 'September', and *Asaramañitse*, 'October', mean bad- and good-smelling, respectively. *Vatravatra* for November means a way of arriving with violence or a downpour of rain. Lastly, *Safary* corresponds to December, but its original meaning is unknown. The Tandroy traditional terms for months, that is, the Sanskrit loanwords via old Javanese, are summarized in Table 2.

English borrowings for months (e.g., *Janoary* and *Febroary* in Malagasy official orthography) are used in standard Malagasy to indicate the 12 months of a year of the Gregorian calendar, but their use is limited to official newspapers or radio transmissions. In daily conversation, French words are largely employed to refer to months or dates.

Table 2. Months

Month	Expression
January	*valasira*
February	*hatsiha*
March	*hiahia*
April	*volamaka, tatakampemba*
May	*volantatake*
June	*sakamasay*
July	*sakavey*
August	*volambita*
September	*asaramanty*
October	*asaramañitse*
November	*vatravatra*
December	*safary*

Table 3. Seasons

Season	Expression
Rainy season	*asara*
Dry season	*faosa*
Spring	*lohataoñe*
Summer	*faosa*
Autumn	——
Winter	*asotry*

3. Seasons

There are no exact terms that refer to seasons. In Tandroy society, the rainy season *asara* or dry season *faosa* and the agricultural cycle, as mentioned above, are the main seasons of the year. *Asotry*, 'winter', is of Sanskrit origin, which is an important factor in demonstrating the historical continuity between Indonesia and Madagascar (Dahl, 1951). Notice that although *asotry* refers to September in Tanosy (the neighboring dialect of Tandroy), it refers to January in Tanala (Beaujard, 1998), a dialect spoken in Southeast. *Lohataoñe*, literally 'spring', means 'the beginning of the year'. The terms for seasons are summarized in Table 3. Note that the rainy season lasts from approximately November to April, and the dry season, from May to October.

CONCLUDING REMARKS

This paper examines the concept of time in the Tandroy speech community, which has maintained the concept of traditional social time from ancient times while, at the same time, being influenced by modern information technology. Biological time is applied in the living culture, and time expressions such as those for keeping track of time and referring to months and seasons project their agricultural cycle. With the introduction of modern technology, increasing numbers of Tandroy people have mobile phones and check the physical time. However, it is true that the people living in isolated areas, as well as those who have moved to urban areas but continue to maintain their traditional lifestyles, still use time expressions that correspond to the 24 hours of a day. This article presents primary data of time expressions in the Tandroy dialect of Malagasy from a sociocultural viewpoint.

NOTES

(2)   See Keenan & Polinsky (1998) and Rasoloson & Rubino (2005) for more details.
(3)   *Hazomanga*, which literally means 'blue tree' (*hazo* 'tree,' *manga* 'blue'), is a traditional religion of the Tandroy. Each clan has its own sacred wooden pole where the members purify themselves or perform confessions.

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