DIRECTION IN KARAJÁ

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1. Introduction. The main purpose of this paper is to present a description of the directional inflection in Karajá verbs[2]. An interesting difference between Karajá on the one hand, and languages such as English or Portuguese, on the other, is that in Karajá there are no lexical opposites for direction, such as English *come* versus *go* and *bring* versus *take*. In Karajá, such a distinction is completely dependent on the morphological mechanisms that are made available by the language. Thus, in the examples below, the prefix *r-* indicates that the event is seen as occurring away from the current location of the speaker (centrifugal direction), whereas the prefix *d-* indicates that the event is seen as occurring towards the current location of the speaker (centripetal direction):

(1)   a.   *krakre*   b.   *kanakre*

          ka-*r*-∅-a=kəre   ka-*d*-∅-a=kəre

          1-*CTFG*-INTR-move=FUT[3]   1-*CTPT*-INTR-move=FUT

          'I will go.'   'I will come.'

The system of directional markers in Karajá presents characteristics that traditionally define an inflectional category, such as obligatoriness, semantic and formal regularity, and productivity (Anderson 1985:163; Bauer 1988:73-87; Bybee 1985:11). The existence of direction as an inflectional category seems to be a fairly rare phenomenon. Talmy (1985:135), for example, in a survey of grammatical categories, states categorically that direction "is not marked inflectionally." According to Bybee, this would be due to its lack of *lexical generality*:

[2] Karajá is a one-member linguistic family of the Macro-Jê stock, spoken along the Araguaia River, Central Brazil. It has four dialects—Southern Karajá, Northern Karajá, Javaé, and Xambioá. Combined, the four dialects have a total of approximately three thousand speakers. The language shows differences between male and female speech, which may in general be accounted for by regular phonological rules. Male speech is characterized, in general, by the deletion of a velar stop occurring in the corresponding female speech form (♀ *kɔha* 'armadillo' > ♂ *ɔha*). Unless otherwise noted, the data presented in this paper are in the female speech of the Southern Karajá dialect. When necessary, data from the different speeches will be identified by the symbols ♀ 'female' and ♂ 'male.'

[3] I choose to present the data both in phonetic transcription (first line, in italic) and phonological transcription (second line) in order to familiarize the reader with some of the morphophonemic processes which occur in Karajá, such as *syncope* (1a), *vowel fusion* (7c) and *[ATR] vowel harmony*. For details on the phonology of Karajá, see Ribeiro (2000). Abbreviations and symbols read as follows: ADM 'admonitory particle;' AL 'allative postposition;' COM 'comitative postposition;' COMP 'compassional particle;' COND 'conditional particle;' CONT 'continuative;' CONV 'converb marker;' DESCR 'descriptive particle;' EMPH 'emphatic;' FUT 'future;' IMP 'imperfective;' INTR 'intransitive verb marker;' LOC 'locative postposition;' NAR 'narrative particle;' POT 'potential particle;' PROGR 'progressive auxiliary;' REDUP 'reduplicative morpheme;' REPET 'repetitive particle;' TRANS 'transitive verb marker.'

> By definition, an inflectional category must be applicable to all stems of the appropriate semantic and syntactic category and must obligatorily occur in the appropriate syntactic context. In order for a morphological process to be so general, it must have only minimal semantic content. If a semantic element has high content, i.e. is very specific, it simply will not be applicable to a large number of stems. [Bybee 1985:16-17]

That is, since the category of direction would in principle be relevant only for motion verbs, it would not apply to a sufficient number of verbs to constitute an inflectional category. Thus, besides being commonly expressed lexically such as in Portuguese *levar* 'to take away' versus *trazer* 'to bring' and English *come* versus *go*, and by clitics, direction is also found expressed derivationally, such as in Latin *eō* 'I go', *ex-eō* 'I go out', *trans-eō* 'I go across.' However, as Bybee (*op. cit.*, 17) observes, "each of these prefixes has a limited lexical applicability, for they are only appropriately added to verbs indicating motion of some sort. Their semantic content prevents them from meeting one of the criteria for inflectional status."

   Bybee's predictions apply well to languages such as Georgian, for example, where the opposition between the particles *mo* 'hither' and *mi* 'thither' seems to be productive only with lexemes denoting some sort of "notional direction towards a goal" (Manning 1996:250).[4] However, in Karajá all verbs inflect for direction, including those that apparently do not indicate a motion at all, such as *ʊrʊ* 'to die' (2) and *ɛkɨwəθɛ* 'to get tired' (3), as shown by the examples below:

(2) a. *rurure*
         ∅-*r*-∅-ʊrʊ=*r*-e
         3-*CTFG*-INTR-die=CTFG-IMP
         'He died (thither).'

   b. *durude*
         ∅-*d*-∅-ʊrʊ=*d*-e
         3-*CTPT*-die=CTPT-IMP
         'He died (hither).'

(3) a. *rekɨwəθere*
         ∅-*r*-∅-ɛkɨwəθɛ=*r*-e
         3-*CTFG*-INTR-get.tired=CTFG-IMP
         'He got tired (thither).'

   b. *dekɨwəθede*
         ∅-*d*-∅-ɛkɨwəθɛ=*d*-e
         3-*CTPT*-INTR-get.tired=CTPT-IMP
         'He got tired (hither).'

   This suggests that, besides its basic, strictly directional use, directional inflection is also used for other purposes. Analyzing the use of the directional markers in narrative texts, this paper explores the hypothesis that directional inflection can be used to show empathy relationships between the participants of the speech act and between narrator and characters in a narrative text, playing a role similar to what in other languages may be performed by obviation systems, evidentials, or attitude markers.

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[4] The grammatical category expressed by the opposition between the particles *mo* and *mi* is called 'orientation' in Georgian linguistics, whereas the term 'direction' is used to refer to another grammatical category, which "consists of a multi-term system of preverbs, arranged in opposed doublets such as 'in' versus 'out,' 'up' versus 'down,' etc." (Manning, *op. cit.*, 250) The use of the term 'direction' in this paper coincides with Talmy's (*op. cit.*, 135) definition: "[Direction] refers to whether the Figure in a Motion event is moving toward or away from the speaker."

2. Karajá morphosyntax.[5] Karajá is an SOV, head-marking language. Contrasting with a fairly simple noun morphology, the language presents a rather complex verb morphology. Stem-formation processes such as compounding, noun incorporation, and reduplication are commonly used. In addition, the verb inflects for *person* (and, cumulatively, *mood*), *direction*, and *voice/valence*. Pronominal direct objects are obligatorily incorporated into the verb. The example below illustrates the distribution of morphemes within the verb word:

(4)   *kai bədɪwarakokre*
          kai   bə-d-ɪ-wa-rakɔ=kəre
          you   2-CTPT-TRANS-1-wait.for=FUT
          'You will wait for me.'

Person agreement markers are divided into two different sets, one occurring in the *realis* (progressive, perfective, and imperfective) and the other in the *irrealis* (future, imperative, potential, and admonitory), as shown in Table 1 below.

Table 1. Subject agreement markers in Karajá

Person[6]	Realis	Irrealis
1st	*a-*	♀ *ka-*/♂ *a-*
2nd	*da-*	*bə-*/*b-*
3rd	∅-	∅-; ♀ *kə-*/♂ *ə-*[7]

In addition, all verbs occur with voice/valence markers. As example (4) above shows, transitive verbs are marked by the prefix *ɪ-*. Intransitive verbs are in general marked by the prefix *a-* (5a) or by its zero allomorph (5b); a small number of intransitive stems, such as *θɛ* 'move down,' are marked by *ɛ-* (10). Transitive stems may be made intransitive by passivization and antipassivization, while intransitive verbs may be transitivized by causativization and by promotion of an oblique argument to direct object position.

(5)   a.   *raritʃarɛrɪ*
            ∅-r-*a*-ritʃa=r-ɛrɪ
            3-CTFG-*INTR*-walk=CTFG-PROGR
            'S/he is walking.'

      b.   *rebʊrere*
            ∅-r-∅-ɛbʊrɛ=r-e
            3-CTFG-*INTR*-get.angry=CTFG-IMP
            'He got angry.'

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[5] The morphosyntactic summary presented here is based on Ribeiro (1996).

[6] The same set of prefixes is used for singular and plural. There is also a pragmatic distinction between a first person plural exclusive (marked by the same set of prefixes used for first person singular) and a first person plural inclusive (inflected for third person).

[7] The prefix *(k)ə-* is restricted to the centripetal direction of the irrealis mood.

As the example above shows, all inflectional categories are expressed by prefixes. The only clear-cut examples of suffixes are derivational, such as the verbalizer -*dɔ̃* and the nominalizer -*dʊ*. However, a number of grammatical categories are expressed by enclitic elements. Tense, for example, does not occur as an inflectional category in Karajá. Instead, tense distinctions are encoded by temporal-aspectual auxiliaries and particles that cliticize to the main verb (Table 2). As it happens with main verbs, the auxiliaries =*(r-)ɛrɪ* 'progressive,' =*(r-)a* 'perfective,' and =*(r-)e* 'imperfective' are also marked for direction (and, in the second person, also for person), as shown by the examples above. The particles =*kǝre* 'future,' =*kɛ* 'potential,' and =*hɛdɔ̃* 'admonitory,' restricted to the irrealis mood, are invariable. A finite verb in Karajá is typically inflected for all categories (*person*, *direction*, and *voice/valence*) and followed by a temporal-aspectual auxiliary or particle.

Table 2. Tense/aspect clitics in Karajá

Auxiliaries		Particles	
=(*r*)*e*	'imperfective'	=*kǝre*	'future'
=(*r*)*a*	'perfective'	=*kɛ*	'potential'
=(*r*)*ɛrɪ*	'progressive'	=*hɛdɔ̃*	'admonitory'

2.1 Direction. As mentioned above, all verbs in Karajá inflect for direction (*centrifugal* or *centripetal*, depending on the speaker's viewpoint). Centripetal direction, marked by the prefix *d-* (realized as [n] before nasals and /a/), indicates that the process occurs towards the speaker. Centrifugal direction, marked by the prefix *r-* (or by its zero-allomorph), indicates that the process occurs in the direction away from the speaker. Thus, both uses of the verb *lɔ* 'to enter' in (6) below convey basically the same meaning, the difference being in the location of the deictic center, the speaker. In the first, marked for centrifugal direction, the speaker is out of the house; in the second, marked for centripetal direction, the speaker is in the house:

(6) a. *malɔkɛ* b. *mǝnalɔkɛ*
         b-∅-a-lɔ=kɛ   bǝ-d-a-lɔ=kɛ
         2-*CTFG*-INTR-enter=POT   2-*CTPT*-INTR-enter=POT
         'Enter!'   'Enter!'

The distribution of the directional prefixes is illustrated below with the complete paradigm for the verb *wɨ* 'to carry', both in the realis (7) and the irrealis (8) mood.[8]

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[8] The double marking of direction in the 1st person centripetal of the realis (7b) is restricted to the Southern Karajá dialect. In Javaé, Xambioá, and Northern Karajá, direction is marked only once in such cases:

a. **Javaé, Xambioá, Northern Karajá**
    adiwɨde
    a-d-ɪ-∅-wɨ=d-e
    1-CTPT-TRANS-3-carry=CTPT-IMP
    'I brought it.'

The interlinear gloss provided for the 1st person centrifugal (7a) is somewhat abstract. It is reconstructed internally, taking the 1st person centripetal as the model. Forms such as (7a) occur in Southern Karajá, Northern Karajá, and Xambioá. In Javaé, on the other hand, 1st person centrifugal forms completely

(7)   ***realis***

a.   *rewɨre*
     r-a-∅-ɪ-∅-wɨ=r-e
     CTFG-1-*CTFG*-TRANS-3-carry=*CTFG*-IMP
     'I took it away.'

b.   *nadiwɨde*
     d-a-d-ɪ-∅-wɨ=d-e
     CTPT-1-CTPT-TRANS-3-carry=*CTPT*-IMP
     'I brought it.'

c.   *ɗewɨɗe*
     ɗa-∅-ɪ-∅-wɨ=ɗ-e
     2-*CTFG*-TRANS-3-carry=2-IMP
     'You took it away.'

d.   *ɗadiwɨɗe*
     ɗa-d-ɪ-∅-wɨ=ɗ-e
     2-*CTPT*-TRANS-3-carry=2-IMP
     'You brought it.'

e.   *riwɨre*
     ∅-r-ɪ-∅-wɨ=r-e
     3-*CTFG*-TRANS-3-carry=*CTFG*-IMP
     'S/he took it away.'

f.   *diwɨde*
     ∅-d-ɪ-∅-wɨ=d-e
     3-*CTPT*-TRANS-3-carry=*CTPT*-IMP
     'S/he brought it.'

(8)   ***irrealis***

a.   *kariwɨkre*
     ka-r-ɪ-∅-wɨ=kəre
     1-*CTFG*-TRANS-3-carry=FUT
     'I will take it away.'

b.   *kadiwɨkre*
     ka-d-ɪ-∅-wɨ=kəre
     1-*CTPT*-TRANS-3-carry=FUT
     'I will bring it.'

c.   *biwɨkre*
     b-∅-ɪ-∅-wɨ=kəre
     2-*CTFG*-TRANS-3-carry=FUT
     'You will take it away.'

d.   *bədiwɨkre*
     bə-d-ɪ-∅-wɨ=kəre
     2-*CTPT*-TRANS-3-carry=FUT
     'You will bring it.'

e.   *riwɨkre*
     ∅-r-ɪ-∅-wɨ=kəre
     3-*CTFG*-TRANS-3-carry=FUT
     'S/he took it away.'

f.   *kədiwɨkre*
     kə-d-ɪ-∅-wɨ=kəre
     3-*CTPT*-TRANS-3-carry=FUT
     'S/he will bring it.'

As the examples above show, the clitic auxiliary *=(r-)e* 'perfective' agrees in person (when in the 2nd person) or direction (when in the 1st and 3rd persons) with the main verb, the same happening to the auxiliaries *=(r-)ɛrɪ* 'progressive' and *=(r-)a* 'perfective'. The pluralizer morpheme *(r-)ɛdɔ̃* also agrees in person and/or direction with the main verb:

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parallel the centripetal form, as it can be seen in the examples below. In this sense, the Javaé dialect presents a more regular paradigm, and may reflect more closely what may have existed in Proto-Karajá.

Javaé

b.   *ariwɨre*
     a-r-ɪ-∅-wɨ=r-e
     1-CTFG-TRANS-3-carry=CTFG-IMP
     'I took it.'

c.   *adiwɨde*
     a-d-ɪ-∅-wɨ=d-e
     1-CTFG-TRANS-3-carry=CTFG-IMP
     'I brought it.'

(9)   a.   *bɪwɨbɛnɜ̃kre*
                b-∅-ɪ-∅-wɨ=b-∅-ɛdɜ̃=kəre
                2-*CTFG*-TRANS-3-carry=2-*CTFG*-PL=FUT
                'You (plural) will take it away.'

        b.   *bədɪwɨbədɛnɜ̃kre*
                bə-*d*-ɪ-∅-wɨ=bə-*d*-ɛdɜ̃=kəre
                2-*CTPT*-TRANS-3-carry=2-*CTPT*-PL=FUT
                'You (plural) will bring it.'

There are strong reasons to consider centrifugal direction as the unmarked member of the opposition. First, only centrifugal markers seem to occur with non-verbal (nominal or postpositional) predicates. In addition, centripetal markers do not seem to appear with verbs in the perfective form, and its occurrence with progressive forms also seems to be limited (strikingly interesting exceptions to be further investigated).[9] Furthermore, as the examples above show, only the centrifugal marker presents zero allomorphs.

3.   Empathy and discourse strategies.   This section briefly analyzes the use of directional inflection in narrative texts, as well as in everyday verbal interactions. As outlined in the Introduction, the hypothesis suggested by the data is that, besides its 'literal,' strictly directional use, directional inflection may be used to signal empathy relationships between participants of the speech act and, in a narrative text, between characters and narrator. The rationale that underlies this hypothesis is straightforward. In any deictic system, the speaker is canonically the deictic center. Directionals can then be used to establish relations of (*physical, emotional, ideological*, etc.) approximation or distanciation from such a deictic center.

The use of directional inflection to signal empathy relationships between participants of the speech act is particularly clear with non-motion verbs, for which both centrifugal and centripetal marking options are available without great semantic constraints. In such cases, the use of a centripetal marker seems to imply that the speaker is somewhat more involved with the process described by the verb. That is why centripetal marking seems to be preferred in situations where advice is being given, such

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[9] In such cases, the opposition between centrifugal and centripetal direction seems to be neutralized, as suggested by examples such as (a) below, in which a progressive verb marked with the centrifugal prefix *r*- may be interpreted as denoting either a centrifugal or a centripetal motion. Notice that the same progressive verb cannot appear with centripetal markers (b).

(a)   *dɪkarɜ̃*   *arəθɜ̃na*   *rɛwɨrɛrɪ*
        dɪkarɜ̃   a-rəθɜ̃da   r-a-∅-ɪ-wɨ=r-ɛrɪ
        I   2-food   CTFG-1-CTFG-TRANS-carry=CTFG-PROGR
        'I'm bringing/taking your food.'

(b)   *dɪkarɜ̃*   *arɜ̃θɜ̃na*   *nadɪwɨdɛrɪ*
        dɪkarɜ̃   a-rɜ̃θɜ̃da   d-a-d-ɪ-wɨ=d-ɛrɪ
        I   2-food   CTPT-1-CTPT-TRANS-carry=CTPT-PROGR
        'I'm bringing/taking your food.'

as in the constructions (10) and (11) below, marked by the admonitory particle =*hɛdɔ̃*. On the other hand, the use of centrifugal marking in such constructions would fail to convey the concern of the speaker with the fate of the addressee.

(10)   *kɔwɔrʊkɔ   makɔwɔnɔ̃kɛkɪ   bədɛθɛhɛnɔ̃*
       kɔwɔrʊ=kɔ   b-∅-a-kɔwɔdɔ̃=kɛkɪ   bə-*d*-ɛ-θɛ=hɛdɔ̃
       tree=AL   2-CTFG-INTR-climb=COND   2-*CTPT*-INTR-move.down=ADM
       'If you climb the tree, you may fall.'

(11)   *bədʊrʊhɛnɔ̃!*
       bə-*d*-∅-ʊrʊ=hɛdɔ̃!
       2-*CTPT*-INTR-die=ADM
       '[Be careful,] you may die!'

Furthermore, in imperative constructions, marked by the potential particle =*kɛ*, the use of centripetal markers seems to convey a higher degree of comradery (12b, 13b), while the use of centrifugal marking would suggest a more distant relationship (12a, 13a).

(12)   a.   *idʒəkɨ wakoku   bɛləkɨkɛ*
             idʒəkɨ wa-koku   b-∅-ɛ-lɨkɨ=kɛ
             story   1-to   2-CTFG-INTR-tell=POT
             'Tell me a story.'

       b.   *idʒəkɨ wakoku   bədɛləkɨkɛ*
             idʒəkɨ wa-koku   bə-d-ɛ-ləkɨ=kɛ
             story   1-to   2-CTPT-INTR-tell=POT
             'Tell me a story.'

(13)   a.   *kakɔ   bʊnɔ̃kɛ*
             ka=kɔ   b-∅-∅-ʊdɔ̃=kɛ
             this=AL   2-CTFG-INTR-sit.down=POT
             'Sit down here.'

       b.   *kakɔ   bədʊnɔ̃kɛ*
             ka=kɔ   bə-d-∅-ʊdɔ̃=kɛ
             this=AL   2-CTPT-INTR-sit.down=POT
             'Sit down here.'

        In narrative texts, especially those narrated mostly in 3rd person, directional inflection is frequently used to signal which character the speaker chooses to be more relevant for the story, by assigning to him or her the role of deictic center. This function of the directional markers in Karajá is similar to the role played by obviation systems, such as the one occurring in Algonquian languages. In these languages, according to Dahlstrom (1999:36), "if more than one third person is mentioned within a certain syntactic domain, then the third person most central to the discourse is referred to by *proximate* forms (of nouns, pronouns, or verb agreement) and the more peripheral third

persons are referred to by *obviative* forms." The factors involved on assigning proximate or obviative status are mostly semantic or discursive. Thus, "if one of the two third persons is a human and the other is (notionally) inanimate, the human will always be proximate and the inanimate third person will always be obviative." When both third persons are humans, "the third person chosen as proximate is often the one the speaker feels closest to, such as a relative of the speaker as opposed to a nonrelative, a Mesquakie as opposed to an Indian of another tribe, or an Indian as opposed to a non-Indian." However, Dahlstrom remarks that these are tendencies, "not hard and fast rules" (Dahlstrom *op. cit.*, 44-45).

In Karajá, quite interesting is the fact that, in choosing the character to whom to assign higher discourse prominence, objective factors such as physical closeness to the speaker can be overcome by factors such as the place where crucial actions are taking place. Thus, in the text presented here, 'The Hawk and the Snake' (see Appendix), the hawk is initially chosen as the deictic center, as shown by the opposition between the verb forms *robi=re* 'he/she saw (thither),' in Line D, and *dobi=de* 'he/she saw (hither),' in Line E. Notice that at this point the hawk is flying in the sky. The choice of 'sky' as opposed to 'ground' is not exactly what one would expect if a purely anthropocentric perspective were adopted.

Thus, there is a strong tendency to assign the role of deictic center to the most salient character or location, and not necessarily to the character or location which is physically closer to the speaker. The same tendency is manifested in other, longer texts, such as in the text 'Krysa-my Ijyy,' which tells the story of a war occurred between the Karajá and the Xavante, their traditional enemies (Ribeiro 1999).[10] The text was narrated by a Karajá man in the same village where some of the narrated events took place. Most of the story is about an expedition of Karajá warriors to Xavante territory in order to revenge the killing of a Karajá youth. The Karajá village is initially presented as the deictic center. At a certain point, the Karajá men ask for the help of Bandeira, a White man, who lends them firearms. This fragment of the text is reproduced below (14). Notice that the narrator adopts Bandeira's viewpoint (*dɔɪdɛdɜ̃=de* 'they *came*') and not the viewpoint of the Karajá men. This reflects the more central role played by Bandeira, the man who has the firearms, at this point of the narrative.

(14)   **Fragment of a Karajá text (Ribeiro 1999)**

a.   *dˈamɜ̃le*   *dɔɪdɛnɜ̃de*   *dˈuidʒɨimɜ̃.*
     dˈabɜ̃=le   Ø-d-Ø-ɔɪ=d-ɛdɜ̃=d-e   dˈʊ=idʒɨi=bɜ̃
     3.AL=EMPH   3-*CTPT*-move(plural)=*CTPT*-PLURAL=*CTPT*-IMP   3.LOC=story=LOC
     'They *came* to him to tell the story.'

b.   *dˈahɛ*   *mɜ̃awamɜ̃awamɜ̃*   *residˈɔɛnɜ̃rɛnɜ̃re.*
     dˈa=hɛ   bɜ̃awa-bɜ̃awa=bɜ̃   Ø-*r*-ɛ-sidˈɔɛdɜ̃=*r*-ɛdɜ̃=*r*-e.
     and=EMPH   firearm-REDUP=LOC   3-*CTFG*-INTR-ask.for=*CTFG*-PLURAL=*CTFG*-IMP
     'And they asked him for firearms.'

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[10] In an earlier version of this paper, the analysis was based on the above-mentioned text 'Krysa-my Ijyy.' Due to space considerations, the entire text was not able to be included in the present work.

Notice that while (14a) is marked for centripetal direction, the verb in the following sentence, (14b), is marked for centrifugal direction, a fact rather common in narrative texts. This suggests that the choice of a centripetal verb is made only to signal a shift in the deictic center. Once the identity of the new deictic center is stated, the narrator takes a neutral position. The same tendency can be noticed in the text 'The Hawk and the Snake' (see Appendix). In Line F, the verb *deθe=de* 'he/she moved down (hither)' signals a shift in the deictic center, reflecting the fact that now the crucial actions are going to take place on the ground. However, the verb in the following sentence, *raaõbidadə̃=kre=bə̃* 'in order to fight,' presents centrifugal marking.

The data presented here suggest that directional marking is commonly used as a tool to confer dramaticity and dynamism to the narrative. In narrating an event in which an action can be contemplated from different angles, the speaker rarely adopts a static point of view. Thus, even the "enemy" can be chosen as the deictic center, if the more intense actions are taking place in the enemy's field. Thus, in the text 'Krysa-my Ijyy,' the deictic center is switched to a Xavante man who is shot (15).

(15)   **Fragment of a Karajá text (Ribeiro 1999)**
a.   *ɗarəkɪhɛ*   *ɪmaɗɨalemə̃*   *diwede,*
        ɗa=rəkɪ=hɛ   ɪ-ba-ɗɨa=le=bə̃   Ø-*d*-ɪ-wɛ=*d*-e
        and=NAR=EMPH   3-liver-middle=EMPH=LOC   3-*CTPT-TRANS*-penetrate=*CTPT*-IMP
        'Then [the bullet] penetrated him right in his liver.'

b.   *rəkiləhə*   *rahinə̃hɨkɨ*   *reθere.*
        rəkɪ=ləhə   Ø-r-a-hidə̃=hɨkɨ   Ø-r-ɛ-θɛ=r-e
        NAR=COMP   3-CTFG-INT-cry=EMPH   3-CTFG-INTR-fall=CTFG-IMP
        'Crying a lot, the poor thing fell.'

Note that the second sentence in the fragment above presents the particle *=ləhə*, which indicates 'compassion.' This reinforces the interpretation given here of centripetal marking as a mechanism to signal empathy towards a given character. Karajá presents a number of *evidentials* and *attitude markers*, discourse-oriented particles indicating the attitude of the speaker in relation to what he or she is uttering—examples of which are *=kɔrɪ* 'admiration, surprise,' *=ka* 'certainty', *=θɔ* 'excitement', *=ləhə* 'compassion', *=də̃* 'sympathy', and *=kɔθədə̃* 'doubt.' The interaction between directional marking and such discoursive particles constitutes a rich theme to be explored in future studies.

4. Final remarks. The present work offers a preliminary account of the directional inflection in Karajá. This paper suggests that direction in Karajá is an inflectional category, in spite of predictions according to which direction would not occur inflectionally (Bybee 1985, Talmy 1985). A possible explanation for the *sui generis* nature of the phenomenon may be found in the wide range of pragmatic and discourse functions that may be played by directional marking in Karajá, a hypothesis which certainly deserves further investigation in the future. As the present study hopefully demonstrates, directional inflection plays a central role in the organization of the discourse in Karajá, a factor that must be considered in future studies of Karajá grammar and ethnopoetics.

APPENDIX
THE HAWK AND THE SNAKE:
A KARAJÁ TEXT[11]

A.   *nawiihikɔ̃*   *hɛka*   *hɛmɔ̃lalawana*
dawiihikɔ̃   hɛka   hɛbɔ̃lala=wəda
hawk   DESCR   snake=COM

wimɔ̃   *radɔnɔ̃mɔ̃hɔ̃re.*
wi=bɔ̃   ∅-r-a-dɔdɔ̃=bɔ̃hɔ̃=r-e
both=LOC   3-CTFG-INT-fight-=CONT=CTFG-IMP
'The hawk and the snake usually fight with each other.'

B.   *ɗahɛ*   *nawiihikɔ̃*   *rʊnɔ̃mɔ̃hɔ̃*
ɗa=hɛ   dawiihikɔ̃̂   ∅-r-∅-ʊdɔ̃=bɔ̃hɔ̃
and=EMPH   hawk   3-CTFG-INTR-sit.down=CONT

ɔwɔrʊɗirɛkɪ   *rəma*   *rɪθamɔ̃.*
ɔwɔrʊ ɗirɛ=kɪ   rəba   ∅-r-ɪ-θa=bɔ̃
tree   on=LOC   hunger   3-CTFG-TRANS-hurt=CONV
'Then the hawk sat down on a tree, hungry.'

C.   *ɗahɛ*   *ruore,*   *nawiihikɔ̃,*
ɗa=hɛ   ∅-r-∅-ʊɔ=r-e   dawiihikɔ̃
and=EMPH   3-CTFG-INTR-fly=CTFG-IMP   hawk

rʊɔmɔ̃   *ratʃimɔ̃*   *rarauθɛmɔ̃.*
∅-r-∅-ʊɔ=bɔ̃   ∅-r-a-tʃi=bɔ̃   rara   uθɛ=bɔ̃
3-CTFG-INTR-fly=CONV   3-CTFG-INTR-be=CONV   vulture like=LOC
'Then the hawk flew, and kept flying like a vulture.'

D.   *ɗarəkɪ*   *rʊɔmɔ̃*   *ratʃimɔ̃hɔ̃*
ɗa=rəkɪ   ∅-r-∅-ʊɔ=bɔ̃   ∅-r-a-tʃi=bɔ̃hɔ̃
and=NAR   3-CTFG-INTR-fly=CONV   3-CTFG-INTR-be=CONT

ɗahɛ   *hɛmɔ̃lalamɔ̃*   <u>*robire.*</u>
ɗa=hɛ   hɛbɔ̃lala=bɔ̃   ∅-*r*-∅-obi=*r*-e
and=EMPH   snake=LOC   3-CTFG-INTR-see=CTFG-IMP
'And, while flying, he saw the snake.'

E.   *ɗahɛ*   *nawiihikɔ̃*   *irabimɔ̃*   *rɛamɔ̃hɔ̃,*
ɗa=hɛ   dawiihikɔ̃   i-rabɨ=bɔ̃   ∅-r-ɛ-a=bɔ̃hɔ̃
and=EMPH   hawk   3-over=LOC   3-CTFG-INTR-move=CONT

idɪ   *ɗaθɔ̃*   *hɛmɔ̃lala*   *ɗʊʊ*   <u>*dobide.*</u>
i-dɪ   ɗa=θɔ̃   hɛbɔ̃lala   ɗʊ   ∅-*d*-∅-obi=*d*-e
3-INSTR   and=REPET   snake   3.LOC   3-CTPT-INTR-see=CTPT-IMP
'The hawk kept flying over it [the snake], and then the snake saw it [the hawk] too.'

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[11] This text was collected from a Southern Karajá male speaker from the village of Hawalò, in June of 1993.

F. *nawiihikɔ̃*   *ɗamɔ̃*   <u>*deθede*</u>
dawiihikɔ̃   ɗabɔ̃   ∅-ɗ-ɛ-θɛ=ɗ-e
hawk   3.AL   3-CTPT-INTR-move.down=CTPT-IMP

   ɗamɔ̃ <u>*raaõbinanɔ̃kremɔ̃.*</u>
ɗabɔ̃   ∅-r-a-aõbidadɔ̃=kre=bɔ̃
3.AL   3-CTFG-INTR-fight=FUT=CONV
'Then the hawk came down, in order to fight with it [the snake]'

G. *ɗahɛ*   *wiwəna*   *raaõbinanɔ̃mɔ̃hɔ̃renɔ̃.*
ɗa=hɛ   wi=wəda   ∅-r-a-aõbidadɔ̃=bɔ̃hɔ̃=r-ɛdɔ̃
and=EMPH   both=COM   3-CTFG-INTR-fight=CONT=CTFG-PL
'They fought each other.'

H. *idɪ* *ɗahɛ*   *nawiihikɔ̃*   *hemɔ̃lala*   *rɪrəbʊnɔ̃re.*
i-dɪ   ɗa=hɛ   dawiihikɔ̃   hɛbɔ̃lala   ∅-r-ɪ-rəbʊdɔ̃=r-e.
3-INSTR and=EMPH   hawk   snake   3-CTFG-TRANS-kill=CTFG-IMP

   idɪ *rɪwɨmɔ̃*   *ruore.*
i-dɪ   ∅-r-ɪ-∅-wɨ=bɔ̃   ∅-r-∅-ʊɔ=r-e
3-INSTR 3-CTFG-TRANS-3-carry=CONV   3-CTFG-INTR-fly=CTFG-IMP
'Then the hawk killed the snake and flew away, taking it.'

I. *kɪɛhɛ*   *idʒɨɨ.*
kɪɛ=hɛ   idʒɨɨ
that=EMPH   story
'That's it, the story.'

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