Switch-reference is licensed by both kinds of coordination: novel Kĩsêdjê data

Rafael Nonato

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1 Introduction

Debates between disagreeing specialists are the bread and butter of scientific development. In areas like the documentation of individual Indigenous languages, however, there is often a single specialist, with the inescapable consequence that no-one else is in as good a position to make criticisms. This is my case as the single linguist currently working on the documentation of Kĩsêdjê, a Jê language spoken in Central Brazil.¹

In this paper I introduce a novel description of switch-reference marking in symmetric and asymmetric coordination in Kĩsêdjê. This description differs from the one I assumed both in Nonato (2014, ch. 6) as well as in the presentation I delivered at the conference that gave rise to the present collection of papers. My novel description arises from a new set of judgments collected in November 2014. These new judgments contradict previously collected ones: whereas the new judgments show that switch-reference isn't sensitive to the distinction between symmetric and asymmetric coordination, the superseded ones showed exactly the opposite.

This wouldn't be a surprising result if we assumed that the difference between symmetric and asymmetric coordination could be explained purely in terms of pragmatic implicatures (Grice 1975, Schmerling 1975, Posner 1980, Carston 1993, 2002). It is, however, very hard to hold that assumption if face of the various syntactic phenomena that have been found to distinguish between symmetric and asymmetric coordination: asymmetric coordination licenses a wider range of extraction types (Ross, 1967; Lakoff, 1986; Culicover and Jackendoff, 1997; Postal, 1998); only symmetric coordination licenses sloppy reconstruction (Nonato, 2014, sec. 6.2.2); only symmetric coordination licenses yiolation of verb-last in embedded clauses (Reich, 2008); and CP coordination is always symmetric (Bjorkman, 2011).

This paper is organized as follows: in section 1.1, I offer an overview of the main typological features of Kĩsêdjê, in section 1.2, I introduce the distinction between symmetric and asymmetric coordination and in section 1.3, I introduce the phenomenon of switch-reference. Having dealt with these prerequisites, in section 2, I present the novel description of switch-reference marking in Kĩsêdjê that I base off the judgments collected in November 2014. In section 3, I investigate the methodological shortcomings

¹I started working with the Kĩsêdjê in 2008, having since realized 8 field trips.

that affected the previous collections of judgments and expose how I believe they were overcome in the latter collection. I close this paper in section 4 by offering a panorama of the empirical and theoretical questions prompted by our current knowledge of the structure of switch-reference in Kĩsêdjê.

1.1 Kīsêdjê's main typological features

Kīsêdjê is strictly head-last in the nominal domain and almost strictly head-last in the clausal domain (only modality, the highest head in the clausal domain, sits to the left of its complement). The verb always comes last in the clause and a direct object would precede it. Any argument PP's would preced those, and be preceded by adjunct PP's and adverbs. The order of the adjuncts can vary. Coming before all of the constituents mentioned above is the subject, with an obligatory modality particle (occurring only in main clauses) to the left of it. Some values of the modality particle license a position to its left. In particular, the factual non-future value of the modality particle licenses a focus position to its left, and if a sentence inflected in the factual non-future modality contains a focused constituents, it will be necessarily dislocated to that position. The scheme in (1) summarizes these observations.

(1) Word-order in the clausal domain (Foc) [Mod [S (Adjuncts) (PP Args) [(DO) V]]]

As mentioned above, Kĩsêdjê is strictly head-last in the nominal domain. Nouns come to the left of determiners, and possessors to the left of nouns. There are no nominal categories of number and adjective (they are realized through relative clauses, which are internally headed in this language). Adpositions are postpositions. Scheme (2) summarizes these observations.

(2) Word-order in the nominal domain [[(Possessor) Noun](Det)](P)

Kīsêdjê is a dependent-marking language. There is no agreement, except for the obligatory presence of a resumptive pronoun marking the base position of dislocated arguments. A nominative-accusative frame is found in main clauses and an ergativeabsolutive frame in embedded clauses. Most verbs have two forms, a morphologically simpler one that they appear in when heading main clauses and a morphologically more complex one that they appear in when heading embedded clauses. Case on noun phrases is marked by phrasal enclitics. There are distinct ergative and nominative enclitics. Noun phrases in the absolutive and accusative case are unmarked. For pronouns, different series distinguish between the four cases, although the distinction between accusative and absolutive is ony overtly marked in the 3rd person and only in a phonologically restricted environment (see Nonato, 2014, sec. 1,2). In the examples that follow, I only gloss distinctions overtly expressed in the relevant word (for instance, if a verb doesn't have two distinct forms, I won't mark whether it is in the embedded form or the main form).

1.2 Symmetric and asymmetric coordination

Clausal coordination is symmetric when the order of the conjuncts doesn't have semantic effects, that is to say, when conjuncts can be swapped while keeping the truth condition of the original sentence (3) and clausal coordination is asymmetric when the order of the conjuncts is semantically relevant, that is to say, when changing their order results in a sentence with different truth conditions (4) (see Ross, 1967; Lakoff, 1986; Culicover and Jackendoff, 1997; Postal, 1998). Thorough this paper, I mark conjunctions heading asymmetric coordination with an overhanging arrow pointing to the right (and or \vec{k}).

- (3) Symmetric Coordination (SC)
 - a. Matthew dates a veterinarian and hopes to date a surgeon.
 - b. = Matthew hopes to date a surgeon and dates a veterinarian.
- (4) Asymmetric Coordination (AC)
 - a. You can use this magic herb and get cured of cancer.
 - b. \neq You can get cured of cancer and use this magic herb.

The semantic distinction between symmetric and asymmetric coordination has been correlated with a number of syntactic differences: asymmetric coordination licenses a wider range of extraction types (Ross, 1967; Lakoff, 1986; Culicover and Jackend-off, 1997; Postal, 1998); only symmetric coordination licenses sloppy reconstruction (Nonato, 2014, sec. 6.2.2); only symmetric coordination licenses gapping (Levin and Prince, 1986); asymmetric coordination in German licenses violation of verb-last in embedded clauses (Reich, 2008); and CP coordination is always symmetric (Bjorkman, 2011). I offer an overview of these properties in Nonato (2014, sec. 6.2).

1.3 Switch-reference in Kĩsêdjê

Kĩsêdjê has clausal coordinators whose morphology indicates whether the subjects of the clauses they conjoin are identical or different, a phenomenon that Jacobsen (1967) was the first to identify as *switch-reference*. The form *ne* of the conjunction is used to conjoin clauses with identical subjects (5), whereas *nhy* is one of the forms used to conjoin clauses with different subjects (6).

(5) Same-subject "and"

Hẽn	Ø	pâj] =ne [Ø	khu-ku.]	
FACT.NFUT	3.NOM	arrive	$=\vec{\&}.\mathrm{ss}$	3.NOM	3.ACC-eat	
${}^{\mathrm{`He}_{\mathrm{i}}} \mathrm{ arrived}$	and (th	en) he _i	$_{*_{j}}$ ate it'			

(6) Different-subject "and" Hẽn $[\varnothing \ 'pâj] =$ **nhy** $[\varnothing \ khu-ku.]$ FACT.NFUT 3.NOM arrive $=\vec{\&}.DS.3.NOM$ 3.NOM 3.ACC-eat 'He_i arrived and (then) he_i,*_i ate it'

In example (6), the form nhy of the different-subject coordinator is indicating agreement with the 3^{rd} person nominative subject of the following clause. Other forms of the different-subject coordinator will be used when the subject of the following clause is of the 1st, 2nd and 1st inclusive persons. Overt agreement only obtains with nominative subjects. With the exception of nhy, the various forms of the different-subject coordinator are homophonous with the nominative pronoun they indicate agreement with. The pronoun itself is only pronounced if not adjacent to the agreeing coordinating conjunction, and otherwise suffers deletion (see Nonato, 2014, ch. 4).

2 Both coordination types license switch-reference

In a field trip realized in November 2014, I collected two consultants' judgments on the use of switch-reference markers in symmetric coordination. These judgements were intended to complement earlier judgments collected in February 2013.² Both consultants, Kawiri Suyá and Jamthô Suyá, are native in Kĩsêdjê and fluent in Portuguese. They have been working with me as consultants for elicitation sessions since respectively 2008 and 2010. Over this time, they have developed a remarkable degree of proficiency at judging whether a sentence sounds natural/grammatical, as well as relating natural-ness/gramaticality to different speech contexts. The elicitation sessions were carried out separately with each consultant. Explanations and scenario-setting were done in Portuguese.

The empirical question I was trying to answer was whether symmetric coordination licensed switch-reference marking in the same way asymmetric coordination does. The only reliable way to answer that question is through the collection of specific judgments in elicitation sessions, as opposed to the inspection of sentences in text corpora. That is due to the fact that, to determine which of the two types of clausal coordination a coordinate complex instantiates, we are required to compare the relevant coordinate complex with a minimally different version of itself having the clausal conjuncts in the opposite order (see section 1.2). There is obviously very little hope of finding the required minimally differing sentence in text corpora. On the other hand, in elicitation sessions they can be easily constructed and their grammaticality judged.

I collected judgments on different sets of sentences, each proposed against a different background. Given the variety of sentences over which I collected judgments, I could minimize the possibility that the overall results were skewed. Background contexts were defined with the help of why-questions. After fixing any grammaticality issues the consultants pointed out in the context-setting questions, I asked their judgments on the grammaticality of possible answers, all featuring symmetric coordination.

For reasons of space, in what follows I introduce only two of the eight sets of sentences collected. These particular sets were chosen because they allow to exemplify the overall pattern the most convincingly. Both sets include (i) sentences differing only in conjunct order and (ii) sentences differing only in the choice of switch-reference marker (samesubject versus different-subject). These two sets also relevantly contrast in that one of them feature symmetric coordination of clauses with different subjects and the other feature symmetric coordination of clauses with identical subjects.

The examples all involve embedded symmetric coordination. They add a layer of complexity I couldn't dispense with. As I discuss in Nonato (2014, sec. 6.2.7), there is

 $^{^{2}}$ In section 3 I will turn my attention to the fact that these earlier judgments were rejected in the more recente elicitation sessions.

reason to doubt that main-clause symmetric coordination exists in Kĩsêdjê at all. When given the task of translating Portuguese sentences that feature main-clause symmetric coordination, my consultants produce sequences in which each clause has the intonation of an independent sentence. Independent sentence intonation in Kĩsêdjê is characterized by sentence-final word lengthening and the addition of a final epenthetic vowel to the sentence-final word should it end in a consonant.

The consultants' judgments were consistent. They agreed that symmetric coordination of clauses with different subjects must be marked with different-subject morphology, with the use of same-subject morphology explicitly ruled out. Conversely, they also agreed that symmetric coordination of clauses with identical subjects must be marked with same-subject morphology, with the use of different-subject morphology explicitly ruled out.

This is the same basic behavior found in asymmetric coordination (5)/(6). Switchreference seems not to be among the phenomena sensitive to coordination type (see section 1.2 for a list of such phenomena). As I already advanced, this is conclusion is in contradiction with my previous stance on the matter. In section 3 I discuss the judgments the superseded theory was based on.

Examples (8), (9) and (10) constitute one of the sets of sentences featuring symmetric causal coordination that I collected judgments on. They were presented as possible answers to the why-question (7). The usual way reasons are expressed in Kĩsêdjê is through asymmetric coordination: the left-hand side conjunct expresses the reason or reasons for a situation, with the situation itself expressed in the right-hand side conjunct. Obviously, nothing blocks the left hand-side conjunct (the reason) from being syntactically complex, which is the case in all of the examples offered for judgment. In (8), (9) and (10), the left-hand side reason-introducing conjunct is construed as the symmetric coordination of two clauses, each picturing an unrelated reason to buy the mattress. It is this embedded symmetric coordinate complex we are interested in. The dominating asymmetric coordinate complex only provides an environment in which we can be sure to be dealing with proper symmetric coordination, as opposed to sequences of independent clauses, as already discussed above.

(7) Context-setting question Kuthe=n ka ntektxira atha py? why=FACT.NFUT 2.NOM mattress this get 'Why did you buy this mattress?'

(8) Answer of the form $\begin{bmatrix} [S_{i} \dots]_{\alpha} \&_{DS} [S_{j} \dots]_{\beta} \end{bmatrix}_{1} \vec{\&} \begin{bmatrix} \dots \end{bmatrix}_{2}$ Hen $\begin{bmatrix} [\emptyset - hondo \quad sire \quad]_{\alpha} = wa \quad [ke \quad i-ma \quad \emptyset - kin \quad]_{\beta} \end{bmatrix}_{1}$ FACT.NFUT 3-exchange be.small =&.DS.1.NOM also 1-to 3-like $= ne \begin{bmatrix} wi \quad khu-py. \\ = \vec{\&}.SS \end{bmatrix}_{2}$ 'I bought it because it was cheap and I liked it.'

lit. $\left[\left[\text{ 'Its exchange was small } \right]_{\alpha} \text{ and } \left[\text{ I also liked it } \right]_{\beta} \right]_{1}$ and $\left[\text{ (then) I got it.' } \right]_{2}$ Examples (8) above and (9) below only differ in the order of the conjuncts α and β . The Kĩsêdjê consultants considered both orders as truth-conditionally equivalent, which constitutes evidence that the coordinatino of α and β in (8) and (9) is indeed symmetric.

(9) Answer of the form
$$\left[[S_{j} \dots]_{\beta} \&_{DS} [S_{i} \dots]_{\alpha} \right]_{1} \vec{k} \left[\dots \right]_{2}$$

Hến $\left[[$ wa i-mã Ø-kĩn] _{β}
FACT.NFUT 1.NOM 1-to 3-like
=**nhy** $\left[k\hat{e}$ Ø-hondo sĩre $]_{\alpha} \right]_{1}$
=&.DS.3.NOM also 3-exchange be.small
=wa $\left[wi \quad khu-py. \\ =\vec{k}.DS.1.NOM \quad in.fact 3.ACC-get \right]_{2}$
'I bought it because I liked it and it was cheap.'
lit. $\left[[$ I liked it] _{β} **and** [also its exchange was small] _{α}]₁
and [(then) I got it.]₂

The symmetrically coordinated conjuncts α and β have different subjects, a fact reflected on the use of different-subject coordinating conjunctions (boldfaced) as heads of the relevant coordinate complexes in both examples. The exact morphological realization of the different-subject cordinating conjunction in each example is distinct because different-subject coordinating conjunctions agree in person with the subject of their right-hand side conjunct. In one example the agreement is with the subject of α (3rd person) whereas in the other it is with the subject of β (1st person).

The use of a different-subject coordinating conjunction to combine α and β is obligatory, as the ungrammaticality of example (10) below attests. The only difference between (10) below and (9) above is the fact that (10) employs the same-subject coordinating conjunction in the position where (9) employs the different-subject coordinating conjunction.

(10) Answer of the form
$$\left[\begin{bmatrix} S_{i} \dots \end{bmatrix}_{\beta} \&_{ss} \begin{bmatrix} S_{j} \dots \end{bmatrix}_{\alpha} \end{bmatrix}_{1} \vec{\&} \begin{bmatrix} \dots \end{bmatrix}_{2}$$

*Hẽn $\begin{bmatrix} \begin{bmatrix} wa & i-mã & \emptyset-kĩn \end{bmatrix}_{\beta} = ne & \begin{bmatrix} kê & \emptyset-hondo & sĩre & \end{bmatrix}_{\alpha} \end{bmatrix}_{1}$
FACT.NFUT 1.NOM 1-to 3-like =&.SS also 3-exchange be.small
=wa $\begin{bmatrix} wi & khu-py. \\ in.fact 3.ACC-get \end{bmatrix}_{2}$
'I bought it because I liked it and it was cheap.'
lit. $\begin{bmatrix} I & liked & it \end{bmatrix}_{\beta} and \begin{bmatrix} its & exchange & was & small \end{bmatrix}_{\alpha} \end{bmatrix}_{1}$
and $\begin{bmatrix} (then) & I & got & it. \end{bmatrix}_{2}$

Examples (12), (13) and (15) constitute another set of sentences featuring symmetric coordination that I collected judgments on. These sentences were also presented as possible answers to specific why-questions. For reasons that I will discuss shortly, (12) and (13) were proposed as answers to (11), whereas (15) was proposed as an answer to the minimally different question (14). Questions (11) and (14) differ only in the choice

of subject, which is 2^{nd} person in (11) and 3^{rd} person in (14).

(11) Context-setting question Kuthe=n ka khupẽ kapẽrẽ ro hwĩsôsôkô? why=FACT.NFUT 2.NOM indians language INS study 'Why do you study indigenous languages?'

The sentences in this second set share the same general format as those in the set presented above: the relevant symmetric coordinate complex is the left-hand side conjunct of a dominating asymmetric coordinate complex expressing reason. A relevant difference between the sets is the fact that whereas in the previous set α and β had differet subjects, in this set they have identical subjects. To make sure that the coordination of α and β is symmetric in the examples provided below, I asked the consultants to judge wether (12) and (13), which differ only in the relative order between α and β , are truth-conditionally equivalent. The consultants report that they are.

(12) Answer of the form
$$\left[[S_{1} \dots]_{a} \&_{ss} [S_{1} \dots]_{\beta} \right]_{1} \vec{\&} \left[\dots \right]_{2}$$

Hën $\left[\left[wa i-mä khupë kapërë mbaj khin \right]_{a} FACT.NFUT 1.NOM 1-to indigenous language know.EMB like
=ne $\left[kê khupë patá mä i-mbraj hräm \right]_{\beta} \right]_{1}$
=&.SS also indigenous village to 1-travel.EMB want
=ne $\left[wi tho hwīsôsôkô. \right]_{2}$
'I study indigenous languages because I like to learn indigenous languages
and also I want to travel to indigenous villages.'
lit. $\left[I like to learn indigenous languages $\left]_{a} \right]_{1}$
and $\left[(then) I study indigenous languages. \right]_{2}$
Hēn $\left[[wa khupē patá mä i-mbraj hräm]_{\beta} \right]_{1}$
FACT.NFUT 1.NOM indigenous languages. $\left]_{2} \right]_{2}$
Hēn $\left[wa khupē patá mä i-mbraj hräm]_{\beta} \right]_{1}$
FACT.NFUT 1.NOM indigenous village to 1-travel.EMB want
=ne $\left[kê i-mä khupē kapērē mbaj khīn]_{a} \right]_{a}$
=&.SS also 1-to indigenous language know.EMB like
=ne $\left[wi tho hwīsôsôkô. \right]_{2} \right]_{a}$
'I study indigenous languages because I want to travel to indigenous villages
and also I want to travel kapērē mbaj khīn]_{a} \right]_{a}$
=&.SS also 1-to indigenous language know.EMB like
=ne $\left[wi tho hwīsôsôkô. \right]_{2} \right]_{a}$
'I study indigenous languages because I want to travel to indigenous villages
and also I like to learn indigenous languages.'
lit. $\left[I want to travel to indigenous villages]_{\beta} \right]_{a}$
and $\left[I like to learn indigenous languages.'
lit. $\left[I want to travel to indigenous languages.'
lit. $\left[I want to travel to indigenous languages.'
lit. $\left[I want to travel to indigenous languages.'
lit. $\left[I want to travel to indigenous languages.'
and $\left[(then) I study indigenous languages.' \right]_{a}$$$$$$$

In examples (12) and (13) above, α and β are connected via the same-subject coordinating conjunction *ne*, reflecting the fact that α and β have identical subjects. The ungrammaticality of example (15) (presented as a possible answer to (14)) shows that such marking is obligatory.

(14) Context-setting question Kuthe=n Khupyt=ta khupẽ kapẽrẽ ro hwĩsôsôkô? why=FACT.NFUT K.=NOM indians language INS study 'Why does Khupyry study indigenous languages?'

(15) Answer of the form
$$\begin{bmatrix} [S_{i} \dots]_{\beta} \&_{DS} [S_{i} \dots]_{\alpha} \end{bmatrix}_{1} \vec{\&} \begin{bmatrix} \dots \end{bmatrix}_{2}$$

*Hẽn $\begin{bmatrix} [\emptyset & \text{khupẽ} & \text{patá} & \text{mã} @-\text{mbraj} & \text{hrãm}]_{\beta} \end{bmatrix}_{1}$
FACT.NFUT 3.NOM indigenous village to 1-travel.EMB want
=**nhy** $\begin{bmatrix} \hat{k}\hat{e} & \text{kh-wã} & \text{khupẽ} & \text{kapẽrẽ} & \text{mbaj} & \text{khĩn} \end{bmatrix}_{\alpha}$
=&.DS also 3-to indigenous language know.EMB like
=ne $\begin{bmatrix} \text{wi} & \text{tho} & \text{hwĩsôsôkô.} \\ =\vec{\&}.SS & \text{in.fact 3.INS study} \end{bmatrix}_{2}$
'He studies indigenous languages because he wants to travel to indigenous

villages and also he likes to learn indigenous languages.

lit. [He wants to travel to indigenous villages] $_{\beta}$

and [he likes to learn indigenous languages]_{α}] and [(then) he studies indigenous languages.]

Note that (15) doesn't differ from (13) only in terms of the coordinating conjunction connecting α and β : it also differs with respect to the subject of those clauses. This difference doesn't weaken the demonstration. Example (15) is identical in structure to (12) and (13). As a matter of fact, it is also identical in truth conditions in the context the sentences were presented. The reference of the subjects of α and β in all three examples is the same, namely, myself (*Khupyry* is how the Kĩsêdjê call me).

These two sets of judgments, added to the other six sets I collected but didn't present above, constitute convincing evidence that, in Kĩsêdjê, switch-reference marking is as contranstive in symmetric coordination as it is in asymmetric coordination. This result wouldn't be surprising at all if we assumed that the difference between symmetric and asymmetric coordination could be explained purely in terms of pragmatic implicatures (Grice 1975, Schmerling 1975, Posner 1980, Carston 1993, 2002).

It is hard to hold such assumption, however, in face of the various syntactic phenomena that have been found to distinguish between symmetric and asymmetric coordination. I have listed those I am aware of in the introduction of this paper and repeated the list at the end of section 1.2. Given these phenomena, it is unexpected that switch-reference should prove to be completely insensitive to coordination type. And indeed, the judgments collected in November 2014 and partly presented above don't show that switch-reference is *completely* insensitive to coordination type. In section 4, I discuss contexts in which I haven't yet tested whether switch-reference behaves the same way in symmetric coordination as it does in asymmetric coordination. But before getting there, in the next section I introduce the previously collected judgments –which were superseded by the judgments collected in November 2014– and discuss the methodological shortcomings that propitiated their (mis)collection.

3 Superseded data and reflections on methodology

When I previously stated that switch-reference is only optionally marked in symmetric coordination I was basing that conclusion on judgments such as (16), (17), and (18). In the field trip I took in November 2014 these very sentences (or sentences with equivalent structures) have been again subject to judgment and this time were considered ungrammatical. This triggered the need to proceed to a more systematic collection of judgments, which resulted in the eight different sets of judgments reported in the previous section.

(16) Superseded judgment

 $\begin{bmatrix} Hw\tilde{s}\delta\hat{s}\delta\hat{k} \ kand\hat{e}\hat{j}\hat{e}=ra \ k\hat{o}re \ hw\tilde{s}\delta\hat{s}\delta\hat{k} \ t\hat{a} \ m\tilde{a} \ pa \]_1 =n \\ [\ students=NOM & 3_{erg} \ school & to \ go_{pl} \] =and.SS \ [\ learn \] \ =and \\ [\ t\hat{a} \ ro \ sakhre \]_3 =n \\ [\ count \] \ =and \ [\ also \ teacher=NOM & PL \ question \] \ FUT \\ `The \ students \ go \ to \ school \ and \ study, \ count, \ and \ the \ teacher \ asks \ them \ questions.' \ i.e. \ `The \ students \ go \ to \ school \ to \ study, \ to \ count, \ and \ for \ the \ teacher \ to \ ask \ them \ questions.' \ `$

(17) Superseded judgment

 $\begin{bmatrix} Hw\bar{s}o\bar{s}o\bar{s}k t \dot{a} kh\bar{a}m & \underline{hwysy}\bar{s}o\bar{m} = nda kh\bar{e}t \\ school & in & \underline{mosquito} = NOM be.not \end{bmatrix} = and \begin{bmatrix} k\bar{e} & \underline{i}-kh\dot{a} = ra \\ 1abs^{-shirt} = NOM \\ thyktxi \end{bmatrix}_2 = wa & [s-at\dot{a}r\dot{a} & kh\bar{e}r\bar{e}.]_3 \\ be.dirty \end{bmatrix} = and.DS.1_{NOM} \begin{bmatrix} 3_{abs}-put_{emb} & be.not \end{bmatrix}$ 'At the school there are no mosquitoes and my shirt was dirty and then I didn't put it on.'

 \emptyset [hwĩsôsôk tá khãm hwysysôm=nda khết]= nhy [kê i-khá=ra FACT [school in mosquito=NOM not]=and.DS [also 1_{abs}-shirt=NOM thyktxi]=wa [khikhre khãm khu-ti]=n [s-atárá be.dirty]=and.DS.1_{NOM} [house in 3_{acc}-lay]=and.SS [3_{acc}-put.on_{emb} khêrê] not] 'There are no mosquitoes at the school and my shirt is dirty, and so I left it

home and didn't put in on.'

I revisited my records of the elicitation sessions in which I collected these judgments and noted that they were collected at the end of very long sessions. In most of them I was trying to determine the obligatoriness or optionality of various phonologically small functional words occurring in some of these sentences, in particular the word $k\hat{e}$ 'also'. The (mistaken) finding that switch-reference wasn't marked in symmetric coordination was unexpected and I didn't have a chance to pursue it further until the following field trip, which happened in November 2014.

⁽¹⁸⁾ Superseded judgment

In the more recent collection of judgments, I made sure to use varied contexts, which helped the consultants in keeping their focus. Since the collection was also directed towards finding the specific behavior of switch-reference in symmetric coordination, I managed to collect more complete paradigms and, as reported, found very clearly that the early results were mistakes.

4 Concluding remarks: research questions

The judgments collected in November 2014 showed very convinciply that, for trivial switches, switch-reference doesn't distinguish between symmetric and asymmetric coordination. By trivial switches I mean situations in which the subjects under comparison are either completely identical or completely distinct.

Besides those situations, there are also the situations I call *non-trivial switches*. Many languages extend the use of same-subject morphology to cases where the subjects, though disjoint, still share a non-empty intersection. This phenomenon has been identified in asymmetric coordination in Kĩsêdjê: same-subject morphology is used to mark asymmetric coordinate complexes in which the subject of the second conjunct includes the subject of the first conjunct (as long as both subjects are of the same grammatical person), as you can see in (19).

(19) Growing-subject switches (subjects of the same person): same-subject marking Athe=n [wa khikhre nh-ihwêt] = {ne/*wa} [aj i-hwêtri Ø-khãm alone=FACT [$\mathbf{1}_{nom}$ house LNK-build] = { $\vec{\&}.ss/*\vec{\&}.DS.1_{nom}$ } [PL $\mathbf{1}_{abs}$ -all $\mathbf{3}_{abs}$ -in aj i-pa.] PL $\mathbf{1}_{abs}$ -live_{pl}] 'I built the house by myself and all of us moved into it.'

 $[S_1 \subset S_2 \text{ and } P_{S_1} = P_{S_2} = 1]$

There are three types of non-trivial switches, listed in (20). The type instantiated in (19) is the growing-subject type. Only non-trivial switches of this type are marked as same-subject in Kīsêdjê, and only, as I have already mentioned, if the subjects compared are of the same grammatical person. In (19), for instance, since the subject of the first clause is of a different grammatical person than the subject of the second clause, different-subject morphology is the only choice, even though this is growing-subject switch. Keep in mind that first person plural corresponds to exclusive 'we' $-wa '1_{nom}' + aj 'PL'$, whereas inclusive 'we' is categorized as a different grammatical person and isn't accompanied by a plural marker $-ku '1+2_{nom}' (* + aj 'PL')$.

- (20) Subtypes of non-trivial switch
 - a. **Growing-Subject**: $S_1 \subset S_2$ $(S_1 = \{i\}; S_2 = \{i, j\})$ I_i built the house by myself but $we_i + j$ all live in it.
 - b. **Shrinking-Subject**: $S_1 \supset S_2$ ($\overline{S_1 = \{i, j\}}; S_2 = \{i\}$) We_i + j built the house together but only $\overline{I_i}$ live in it.
 - c. Strictly-Intersecting-Subjects: $S_1 \cap S_2 \neq \emptyset, S_1 \not\subset S_2, S_1 \not\supseteq S_2$ ($S_1 = \{i, j\}; S_2 = \{i, k\}$) He_i and his father-in-law_j built the house and he_i and his wife k live in it.

(21) Growing-subject switches (different-person subjects): different-subject marking Akatxi khêt khãm na [wa a-thok] = { $^{ku/*ne}$ } [(*aj) thẽ] morning in FACT [$\mathbf{1}_{nom} 2_{acc}$ -wake.up] = { $^{\vec{k}.DS.1+2_{nom}/*\vec{k}.SS}$ } [(*PL) go_{sg}] =n [thep jariri.] = $\vec{k}.SS$ [fish look.for] 'In the morning I woke you up and we_{incl.} went fishing.' [$S_1 \subset S_2$ but ($P_{S_1} = \mathbf{1}$) \neq ($P_{S_2} = \mathbf{1} + \mathbf{2}$)]

Shrinking-subject switches and strictly-intersecting-subject switches are always marked in Kĩsêdjê with different subject morphology —see (22) and (23), respectively. Other switch-reference marking languages have different rules on what kinds of non-trivial switches are marked with same subject morphology and what kinds are marked with different subject morphology.

- (22) Shrinking-subject switches $(S_1 \supset S_2)$: different-subject marking Hen [wa aj i-hwêtri khikhre nhihwêt] = {wa/*ne} [pa-rit aj Ø-kham FACT [1_{nom} PL 1_{abs}-all house build] = { $\vec{\&}.DS.1_{nom}/*\vec{\&}.SS$ } [1-only PL 3_{abs}-in Ø-mbra] 3_{abs}-live_{sg}] 'All of us build the house but only the two of us live there.'
- (23) Strictly-intersecting-subject switch: different-subject marking $(S_1 \cap S_2 \neq \emptyset, S_1 \not\subset S_2, S_1 \not\supseteq S_2)$ [Rafael me s-umbrengêt=ta khikhre nhihwêt] = {nhy/*ne} [[R. and 3_{abs}-father.in.law=NOM house build] = { $\vec{\&}.DS.3_{nom}/*\vec{\&}.SS$ } [Rafael me \emptyset -hrõ wit \emptyset -khãm mbra.] Rafael and 3_{abs}-wife only 3_{abs}-in live] 'Rafael and his father-in-law built a house and Rafael and his wife live in it.'

The extension of same-subject morphology to mark non-trivial switches is a very widely attested phenomenon. Table 1 compiles data about languages that have been documented in that respect. The symbols used on the table are: \checkmark , to indicate that a language allows same-subject marking in a specific situation; *, to indicate that a language disallows same-subject marking in a specific situation only in case the subjects under comparison are of the same grammatical person. Cells left empty indicate that no information was found in the literature about how a language behaves in certain situation. I haven't found any mention in the cited literature of whether the phenomenon was documented in only a specific kind of coordination. Note, on the other hand, that switch-reference isn't restricted to coordination, and indeed in some languages it seems to only be found in clausal adjunction.

Languago	Family	SS			Reference	
Language	Family	$1 \subset 2$	$1 \supset 2$	$1\cap 2$	Reference	
Mojave	Yuman	\checkmark	\checkmark		Munro (1980)	
Huichol	Uzo-Aztecan	\checkmark	\checkmark	\checkmark	Comrie (1983)	
Kobon	Trans New-Guinea	p=	\checkmark	$\mathbf{p} =$	Comrie (1983)	
Gokana	Niger-Congo	\checkmark	*	*	Comrie (1983)	
Lenakel	Austronesian	\checkmark	*	*	Lynch (1978, 1983)	
Washo	Hokan	\checkmark	\checkmark	*	Finer (1984, p. 85)	
Kĩsêdjê	Jê	p=	*	*	my fieldwork data	
Kashaya	Pomoan	\checkmark	\checkmark		Oswalt (1961)	
Zuni	Isolate	*	\checkmark		Nichols (2000)	
all	Yuman	\checkmark	\checkmark		Langdon and Munro (1979)	
Diyari	Pama–Nyungan	\checkmark	*		Finer (1984)	
Jamul	Yuman	\checkmark	*		Miller (2001)	
Udihe	Altaic	\checkmark	\checkmark		Nikolaeva and Tolskaya (2001)	
Mian	Ok (Trans New-Guinea)	\checkmark	\checkmark		Fedden (2011)	
Tauya	Trans New-Guinea		\checkmark		MacDonald (1990)	
Usan	Numugenan	p=	\checkmark		Reesnik (1983)	
Telefol	Ok (Trans New-Guinea)		\checkmark		Healey (1966)	
Savosavo	Papuan	\checkmark			Wegener (2012)	

Table 1: Languages that use same-subject marking for nonstrictly co-referent subjects

The Kĩsêdjê examples used above to illustrate switch-reference marking in non-trivial switch situations are clear instances of asymmetric coordination. As I already stated, no examples of non-trivial switches in symmetric coordination have been collected. It would be surprising to find that switch-reference marking in symmetric coordination in the intrinsically asymmetric context of non-trivial switches were marked in the same fashion described above. Notwithstanding my expectations, this is an open empirical question, with possibly interesting theoretical consequences.

References

- Bjorkman, Bronwyn M. (2011). "A Syntactic Correlate of Semantic Asymmetries in Clausal Coordination". In: *Proceedings of NELS 41*. Ed. by N. LaCara, Y. Park, and L. Fainleib.
- Carston, Robyn (1993). "Conjunction, explanation and relevance". In: *Lingua* 90.1, pp. 27–48.
- (2002). Thoughts and utterances: The pragmatics of explicit communication. Wiley-Blackwell.
- Comrie, Bernard (1983). "Switch-reference in Huichol: a typological study". In: *Switch-reference and universal grammar*. Ed. by John Haiman and Pamela Munro. Amsterdam: John Benjamins, pp. 17–37.
- Culicover, Peter W. and Ray Jackendoff (1997). "Semantic Subordination despite Syntactic Coordination". In: *Linguistic Inquiry* 28.2, pp. 195–217.
- Fedden, Sebastian (2011). A grammar of Mian. Vol. 55. De Gruyter Mouton.

- Finer, Daniel L. (1984). "The Formal Grammar of Switch-Reference". PhD thesis. UMass Amherst.
- Grice, H. Paul (1975). "Logic and conversation". In: Syntax and Semantics. Ed. by P. Cole and J. L. Morgan. Vol. 3: Speech Acts. Acabemic Press, pp. 41–58.
- Healey, Phyllis M (1966). Levels and chaining in Telefol sentences. 5. Australian National University.
- Jacobsen, William (1967). "Switch-Reference in Hokan-Coahuiltec". In: Studies in Southwestern Ethnolinguistics. Ed. by Dell H. Hymes and William E. Bittle. Mouton, The Hague.
- Lakoff, George (1986). "Frame Semantic Control of the Coordinate Structure Constraint". In: Papers from the Parasession on Pragmatics and Grammatical Theory. Ed. by Anne M. Farley, Peter T. Farley, and Karl-Erik McCullough.
- Langdon, Margaret and Pamela Munro (1979). "Subject and (Switch-)Reference in Yuman". In: *Folia Linguistica* 13.
- Levin, Nancy S. and Ellen F. Prince (1986). "Gapping and causal implicature". In: Research on Language & Social Interaction 19.3, pp. 351–364.
- Lynch, John Dominic (1978). A grammar of Lenakel. Department of Linguistics, Research School of Pacific Studies, Australian National University.
- (1983). "Switch-reference in Lenakel". In: Switch-reference and universal grammar.
 Ed. by John Haiman and Pamela Munro. Amsterdam: John Benjamins, pp. 209–221.
- MacDonald, Lorna (1990). A grammar of Tauya. Ed. by Georg Bossong and Wallace Chafe. Vol. 6. Mouton de Gruyter.
- Miller, Amy (2001). A grammar of Jamul Tiipay. Ed. by Georg Bossong and Wallace Chafe. Vol. 23. Mouton Grammar Library. De Gruyter Mouton.
- Munro, Pamela, ed. (1980). *Studies of Switch-Reference*. UCLA Papers in Syntax 8. Department of Linguistics, UCLA.
- Nichols, Lynn (2000). "Rethinking switch reference". In: *Papers in Honor of Ken Hale: Working Papers on Endangered and Less Familiar Languages.* Ed. by Andrew Carnie, Eloise Jelinek, and Mary Ann Willie.
- Nikolaeva, Irina and Maria Tolskaya (2001). A grammar of Udihe. Ed. by Georg Bossong and Bernard Comrie. Vol. 22. De Gruyter Mouton.
- Nonato, Rafael (2014). "Clause chaining, switch reference and coordination". PhD thesis. MIT. URL: http://rafaeln.github.io/papers/thesis.pdf.
- Oswalt, Robert Louis (1961). "A Kashaya grammar (Southwestern Pomo)". PhD thesis. University of California, Berkeley.
- Posner, Roland (1980). "Semantics and pragmatics of sentence connectives in natural language". In: Speech act theory and pragmatics. Springer, pp. 169–203.
- Postal, Paul Martin (1998). Three Investigations of Extraction. The MIT Press.
- Reesnik, Ger P. (1983). "Switch reference and topicality hierarchies". In: *Studies in Language* 2.7.
- Reich, Ingo (2008). "From discourse to "odd coordination": On asymmetric coordination and subject gaps in German". In: 'Subordination' versus 'coordination' in sentence and text: A cross-linguistic perspective. Ed. by Cathrine Fabricius-Hansen and Wiebke Ramm, pp. 281–303.
- Ross, John Robert (1967). "Constraints on variables in Syntax". PhD thesis. MIT.

- Schmerling, Susan (1975). "Asymmetric conjunction and rules of conversation". In: Syntax and semantics 3, pp. 211–231.
- Wegener, Claudia (2012). A Grammar of Savosavo. Ed. by Georg Bossong, Bernard Comrie, and Matthew Dryer. Vol. 61. Mouton de Gruyter.