

Is there Switch-Reference Marking in Coordinated Clauses?

Philipp Weisser*

Abstract

The question of whether there are languages which exhibit switch-reference marking in coordinated clauses has emerged to be a very important one for the whole topic of switch-reference and interclausal dependencies. In this paper, I examine all languages claimed to have switch-reference marking in coordinated clauses in detail. I will show that in all languages in question switch-reference marking behaves totally identical with respect to three independent parameters. I argue that this is not a coincidence and can be nicely explained by assuming that what looks like switch-reference marking in these languages is in fact a completely different phenomenon, namely tight and loose coordination. Hence, I argue that the question raised in the title of this paper is to be answered with "no".

1. Introduction

The literature on switch-reference is characterized by an ongoing debate about the syntactic contexts in which switch-reference is attested and the ones in which it is not. Not long after Finer (1984, 1985) published his ground-breaking works on the topic, there have been several replies that his empirical generalizations are not borne out cross-linguistically. Finer (1984, 1985) analyzes cases of switch-reference as instances of syntactic binding mediated by some syntactic head at the top of the embedded clause. Against the background of this theory, he claims that switch-reference only occurs in subordinate clauses, more precisely in adverbial subordinate clauses. Finer is not entirely explicit about whether he thinks that SR also occurs in subordinate complement clauses or not, but he explicitly claims that there is no SR relation in coordinated clauses. This claim has provoked several replies arguing for the contrary. In a series of articles about the Pama-Nyungan language Amele, Roberts (1987, 1988*a,b*) claimed that clause chains in

*For helpful comments and discussion I thank the participants of the Colloquium "Neuere Arbeiten zur Grammatiktheorie" at the University of Leipzig. This research was conducted in the course of the project "Lokale Modellierung nicht-lokaler Abhängigkeiten in der Syntax (local modeling of non-local dependencies in syntax)" funded by the DFG (Deutsche Forschungsgemeinschaft).

Amele, which exhibit switch-reference marking, rather resemble coordinate structures. Nevertheless the binding approach to switch-reference was further pursued by Broadwell (1997) and Watanabe (2000). The former argues on the basis of data from Chichewa and Choctaw that although the constructions may share several properties with coordinated clauses, they can be uniformly analyzed as instances of clause-chaining. Broadwell argues that clause-chaining involves a c-command relation and may thus be captured by the binding approach adopted by Finer. Thus, the line of argumentation adopted by those who followed the binding approach was to reanalyze data which looked like coordination as instances of clause-chaining. However, recent literature (Stirling (1993) and especially McKenzie (2007, 2010, 2011)) has discussed several cases which look like instances of SR and which can hardly be reanalyzed as clause-chaining. Hence, the question is whether the binding approach should be rejected on the basis of these data. In this article I contribute to this discussion by taking a closer look at all the examples which appear to be clear instances of SR marking in coordination. I will depart from Broadwell's line of argumentation in that I am not going to argue that these data have to be reanalyzed as clause-chaining. Nevertheless, I will show that none of the examples should be analyzed as instances of switch-reference at all because they differ from other cases of switch-reference with respect to several properties. Hence, I will argue that what we are dealing with in these languages is a totally different phenomenon. The second section revisits the aforementioned discussion about the syntactic contexts of switch-reference. In the third section, I take a closer look at the problematic data which were used as an argument against the binding approach. The fourth section discusses the findings of the previous section and argues for the conclusion that these cases are not to be treated as instances of SR at all. In section six I discuss how these languages should be analyzed. The last section briefly restates the theoretical consequences of my argumentation.

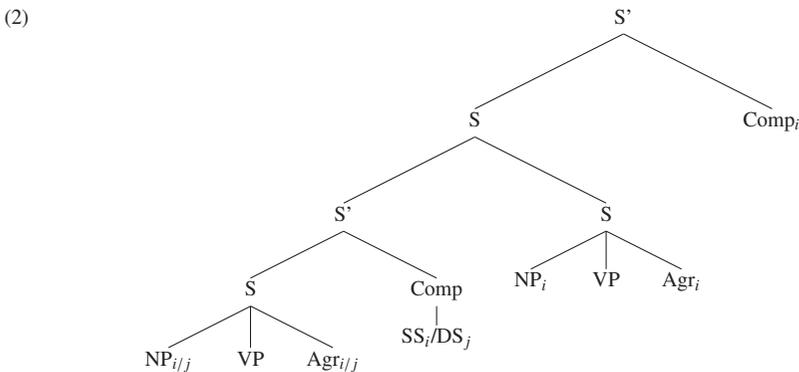
2. Previous accounts of Switch Reference

The question of whether switch-reference (SR) marking is attested in clear cases of clausal coordination (i.e. coordination of two CPs) has emerged to be a decisive one for the whole topic. To see why, we have to take a look at some previous accounts.

As already mentioned, one of the first works on the topic of SR and probably the most influential one is Finer (1984, 1985). He was the first one to discuss examples like (1) from a theoretical perspective.

- (1) *Mojave (Munro 1980:145)*
- a. nya-isvar-k iima-k
 when-sing-SS dance-Tns
 'When he_i sang, he_i danced.'
 - b. nya-isvar-m iima-k
 when-sing-DS dance-Tns
 'When he_j sang, he_i danced.'

The marking of the verb in one clause depends on whether its subject is identical with the subject of another clause. If it is identical, Same-Subject-Marking (SS) is used, if not, Different-Subject-Marking (DS) is used. According to Finer, this long distance dependency can be accounted for by means of binding theory. He proposes that the switch-reference marker can either be a bound anaphor (in the case of a same subject relation) or an unbound pronominal (in a different subject relation), both located in the Comp-position of the embedded clause respectively.



The subject NP of both clauses agrees with its Agr-head and since the Agr-head itself also agrees with the Comp-head, both subject NPs agree with the Comp-head by transitivity. Now, if the Comp-head of the embedded clause is an anaphor, it must be bound in its governing category, if it is a pronominal, it must not be. In other words, an SS morpheme must be c-commanded¹ by the Comp-head of a higher clause, an DS morpheme must not be.

Thus, Finer's whole approach is highly dependent on whether there is a c-command relation between all elements involved. The Agr-head (Infl) must c-command the subject, the Comp-head must c-command the Agr-head and, most

¹Finer draws on a definition of c-command by Belletti & Rizzi (1981) which would nowadays be called m-command

The same applies to coordinated clauses. Subordinate clauses, however, can appear before and after the matrix clause.

(4) Subordination Roberts (1988b:55f)

- a. Ija ja hud-ig-en fi uqa sab man-igi-an
 1.SG fire open.-1.SG-FUT if 3.SG food roast-3.SG-FUT
 'If I light the fire she will cook the food'
- b. Uqa sab man-igi-an ija ja hud-ig-en fi
 3.SG food roast-3.SG-FUT 1.SG fire open.-1.SG-FUT if
 'She will cook the food if I light the fire'

(5) Coordination

- a. Ija ja hud-ig-a qa uqa sab mane-i-a
 1.SG fire open.-1.SG-FUT but 3.SG food roast-3.SG-TOD.PAST
 'I lit the fire but she cooked the food'
- b. *Uqa sab mane-i-a ija ja hud-ig-a fi
 3.SG food roast-3.SG-TOD.PAST 1.SG fire open.-1.SG-TOD.P if
 'I lit the fire but she cooked the food'

(6) Clause Chaining

- a. Ho busale-ce-b fi dana age qo-qag-an
 pig run.out-DS-3.SG if man 3.PL hit-3.PL-FUT
 'If the pig runs out, the men will kill it.'
- b. *Dana age qo-qag-an ho busale-ce-b fi
 man 3.PL hit-3.PL-FUT pig run.out-DS-3.SG if
 'The men will kill it if the pig runs out, '

With respect to both phenomena, clause chains behave like coordinated clauses and unlike subordinated ones. However, strictly speaking, both asymmetries between subordination on the one hand and clause chaining and coordination on the other only show that the clause chaining construction differs from prototypical cases of subordination.

Broadwell (1997) weakens the claim of Finer (1985) in that he acknowledges that cases of clause chaining are no cases of prototypical subordination. However, he argues on the basis of data from Chichewa and Choctaw that clause chaining constructions are neither clear cases of subordination nor clear cases of coordination. Rather they exhibit properties of both clause linkage types. But, as Broadwell argues, clauses within a clause chain do allow a c-command relation between the head of the clause chain and the subsequent matrix clause. This is illustrated by the fact that there is no Coordinate Structure Constraint effect for clause chains (7-a). However, with real coordination, we find a violation of the Coordinate Structure

Constraint (7-b). The same asymmetries can be found in clause chaining constructions of Papuan languages (8).

(7) Extraction in Choctaw Broadwell (1997:11)

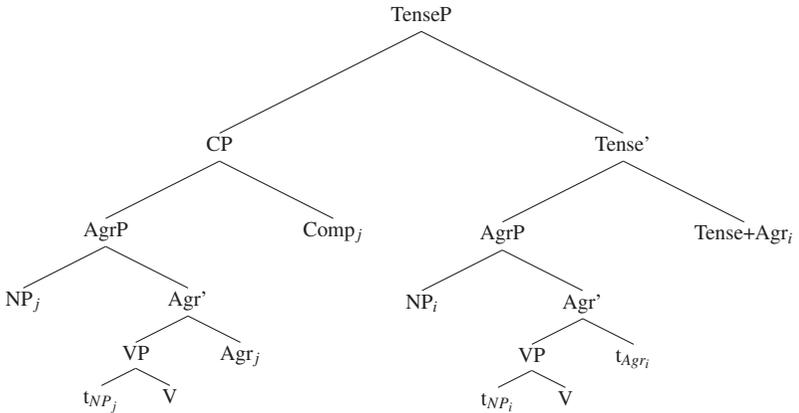
- a. *Katah-oosh_i John-at taloowa-na t_i hilhah?*
 who-FOC:NOM John-NOM sing-DS t dance
 'Who_i did John_j sing and t_i dance?'
 b. **Katah-oosh_i John-at taloowa-tok anoti t_i hilha-tok?*
 who-FOC:NOM John-NOM sing-PAST and t dance-PAST
 'Who_i did John_j sing and t_i dance?'

(8) *ne-ni we tu-a-te yau-i=ne?*
 3.SG-ERG who.NOM give-3.SG-DS see-3.PL=Q
 'Whom did he give it? and they saw him' (= 'Whom did he give it as they saw him?')

Tauya (Papuan) McDonald (1990)

Movement dependencies like in (7-a) are generally thought to involve a c-command relation between the trace and the landing site of a moved constituent and hence, clause chains in Choctaw must be c-commanded by the subsequent clause. In the more recent literature about clause chains (see Dooley (2010a,b) and references cited therein), the fact that extraction from one clause out of a clause chain does not yield a CSC violation has become a defining criterion for the construction as such. Hence, it seems to be uncontroversial nowadays that cases of clause chaining allow for a c-command relation between each clause within the clause chain and the matrix clause at the end. Thus, Broadwell argues that although Finer's (1984,1985) theory cannot be maintained completely, it only needs some minor adaptations to account for the data of Amele, Choctaw and other clause chaining languages. According to Broadwell (1997), the structure of clause chains is the following:

(9)



The tree in (9) illustrates the underlying structure of SR-marking in clause chains. There is a tense phrase which consists of both clauses. The Agr head of the phrase which is merged in the complement of the Tense head then head moves up and adjoins to the Tense head. It is now in the position where it may m-command the Comp head of the previous clause and thus may determine whether the Comp head of the first clause chain shows SS or DS marking.

This adaptation of Finer’s theory can explain why SR marking may occur in clause chaining constructions and, according to Broadwell, it derives that Choctaw clause chains, just like clause chains in Amele, have a fixed order of clauses. Following Broadwell, the Tense projection entails some precedence relation between the respective clause chains and hence their order is, of course, fixed. If clause chaining was adjunction, the fixed clause order would be unexpected³.

Apart from the discussion about the status of clause chains, recent literature has brought up some other cases that seem problematic for the binding approach. In these cases, there is no reason to doubt that we are dealing with cases of coordination. Dahlstrom (1982) was the first to discuss data from Lakhota, a Sioux language from North America. Stirling (1993) also noted that there might be some residual cases of Switch Reference in canonical coordination, however, she also refrained from analysing them. Recently, McKenzie (2007,2010,2011) argued for cases of SR in coordinated clauses. He mainly draws on data from Kiowa but he also discusses data from Lakhota and Pitjantjatjara.

³However, it is unclear whether the Tense projection can handle more than two clausal arguments. If not, that would be highly problematic because, as I noted above, clause chains tend to appear in long sequences with up to twenty clauses.

If these examples were real instances of switch-reference marking in two coordinated clauses, this would be a major setback for the binding approach put forward by *Finer (1984,1985)*, *Broadwell (1997)* and *Watanabe's (2000)* reanalysis of *Finer's* original theory but also to all other approaches which draw on the concept of *c-*, or *m-command* (e.g. *Camacho (2010)*, *Assmann (this volume)*, *Georgi (this volume)*). In the next section, I will discuss the relevant data from all the languages in question and pave the way towards an answer to the question in the title of this paper.

3. Apparent Counterexamples

This section gives an overview of all the languages I could find which seem to provide examples for SR-marking in clear cases of coordination. The first one to provide such examples was *Dahlstrom (1982)*, who discussed data from *Lakhota*, the primary language of the *Sioux Indians*. In *Lakhota*, two clauses can either be conjoined with the conjunction *na* or with the conjunction *yũk^hã* and some researchers (e.g. *Chafe (1976)*) have argued that this is an instance of a clear-cut switch-reference system since *na* indicates same-subject and *yũk^hã* indicates different-subject as in (10).

- (10) a. Joe wĩyã wãhãska č^ha wãyãkĩ na heye...
 Joe woman tall 'a' see and.SS say
 'Joe saw a woman who was tall and he said...'
 b. Joe wĩyã wãhãska č^ha wãyãkĩ yũk^hã heye...
 Joe woman tall 'a' see and.DS say
 'Joe saw a woman who was tall and she said...'
 Dahlstrom (1982)

Dahlstrom's article is partly a response to these researchers and she argues that the *Lakhota* system looks more like a mechanism to indicate continuity or discontinuity of the action. She gives all four logically possible counterexamples to the generalization above. Cases in which the context is same-subject but the conjunction *yũk^hã* is used (11-a). Cases with different-subject but *yũk^hã* is prohibited (11-b). Cases with different-subject and *na* (11-c) and finally cases with same-subject where *na* cannot be used (11-d).

- (11) a. k^hoškalka nũp k^holakič^hiya-pi na lila t^hekič^hixila-pi.
 young.man two friend.RECIP-PL and.SS very love-RECIP-PL
 Yũk^hã heniyoš nũp ila zuya iyaya-pi
 and.DS those two only to.war set.off-PL
 'Two young men were friends with each other and loved each other very much. One day, those two set off to war.'

- b. *č^huwe leye leč^hi taktokanūhā he. Yūk^hā asāpi op^het^hū wahi
 sister say here what.2.do Q. and.DS milk buy 1.come
 ep^he
 I.say
 'My sister said: What are you doing here? And I said: I came to buy
 milk'
- c. č^ha ota ileyapi na el ixpeya-pi na heč^hel
 wood much make.burn-PL and.SS on place-PL and.SS thus
 xuɣnaɣe
 burn.up
 'They set fire to a lot of wood and placed him up on it and he burned
 up'
- d. *mazop^hiyeta wa'i na č^huwe wāblake
 store.to 1-go and.SS sister 1-saw
 'I went to the store and I saw my sister' Dahlstrom (1982)

According to Dahlstrom (1982), the relevant factor is not the identical reference of the subject but rather the continuity of the action. The opposition of *yūk^hā* and *na* encodes a change of scenery, place or time, not a change of subjects. And in fact, this observation explains the data above. In (11-c), *na* can be used because there is no change of scenery. In (11-d), *na* cannot be used because the place (and thus the scenery) of both actions described has changed. In (11-a), *yūk^hā* can be used despite the identical subjects of both conjuncts because there is a shift in scenery unlike in (11-a) where *yūk^hā* cannot be used.

Dahlstrom's (1982) examples are prototypical examples of what Stirling (1993) calls non-canonical switch-reference because the respective SR-markers are not encoding the relation between the subjects of both clauses but rather the relation between the clauses as a whole. However, it is interesting to note that Dahlstrom (1982) originally claimed that Lakhota exhibits no instance of switch-reference at all.

Another language to be considered is Yakunyjtajara, a Western Desert language of Central Australia. Goddard's (1985) grammar provides a good overview of the switch-reference system in that language. Yakunyjtajara has a pretty simple SR marking system in subordinate purpose clauses. The minimal pair in (12) shows that in cases of non-identity between the subjects of the purpose and the matrix clause, the respective DS marker for purpose clauses is affixed to the verb.

- (12) Subordinate clauses in Yakunyŋtjajara Goddard (1985)
- a. kunga-ngku tii kutja-nu tjiki-ntji-kitja-ngku
 woman-ERG tea.ACC heat-PAST drink-NOML-INTENT-ERG
 'The woman heated the tea (because she wanted) to drink'
- b. kunga-ngku tii kutja-nu (tjitji-ngku)
 woman-ERG tea.ACC heat-PAST (child-ERG)
 tjiki-ntja-ku
 drink-NOML-PURP.DS
 'The woman made some tea for someone/the child to drink'

In addition to SR in subordinate clauses, Yakunyŋtjajara also has what seems to be SR marking in coordinate clauses. However, in these cases, they do not use the same morphemes but the two conjunctions *munu* and *kaa*. (13-a) shows the use of *munu* and (13-b) shows the use of *kaa*.

- (13) Coordinated clauses in Yakunyŋtjajara Goddard (1985)
- a. nyina-ra paluru paka-nu munu yanku-la maa-ngari-ngu
 sit-CVB DEF(NOM) get.up-PAST and.SS go-CVB away-lie-past
 munu piyuku yanku-la maa.ngari-ngu
 and.SS again go-CVB away-lie-past
 'Having stayed some time, she set off, and having travelled for some time camped and again travelled and camped away.'
- b. mamu-ngku patja-ni kaa nganana waṯarku
 evil.being-ERG bite-PRES and.DS 1.PL.NOM heedless.NOM
 nyina-nyi
 sit-PRES
 'Evil spirit beings are biting them. And/But we are not paying attention.'

However, as Goddard (1985) notes, there are a lot of counterexamples which clearly show that the actual function of these two conjunctions is to encode continuity or discontinuity of action. Any change of place, time or referents licenses the use of the discontinuity marker *kaa*. In (14), the contrastive marker *kaa* is used although the subjects of both clauses are the first person plural pronouns *nganana*.

- (14) kaa nganaṅa iriti kap palya-ngka nyina-ngi... palu
 and.DS 1.PL.NOM long.ago water good-LOC ait-PAST.IMPF but
 nganaṅa-maṅtu kapi palya-ngka nyina-ngi kaa
 1.PL.NOM-CERTAINLY water good-LOC sit-PAST.IMPF and.DS
 nganaṅa kuwri kapi puwa-nguru pika ura-ṅi
 1.PL.NOM now water bore-ABL sickness(ACC) get-PRES
 'And in the old days we had good water... only of course in the old days
 we had good water, but these days we get sicknesses from bore water.'

Interestingly, the SR system in subordinate clauses in Yakunyjtjara does not allow such uses. The SR markers for subordinate clauses cannot be used to indicate change of time or place, its use is restricted to indicate referential (non-)identity.

The same pattern can be found in another Western Desert language, the closely related Pitjantjara. Pitjantjara exhibits SR marking in subordinate as well as coordinate clauses but, just as in Yakunyjtjara, uses two completely independent sets or morphemes for both contexts. And, just like in Yakunyjtjara, only the ones used in coordination can indicate change of place and time.

- (15) Pula ngalkula wiya-ti-ngkula ngari-ngu ka kunyu
 3.DU.NOM eat-ANT.SS NEG-INCH-ANT.SS lie-PAST and.DS REP
 palu-mpa mama ngunyju-ku ngura ila-ri-ngu-lta
 3.SG.GEN father mother-GEN place near-INCH-PAST-EMPH
 'After they had eaten it all, they lay down. They were really getting near
 their mother's and father's place now.' Pitjantjara (Bowe 1990:97)

In a series of publications McKenzie (2007, 2011) argues for the fact that the binding approach (Finer (1984, 1985) and Broadwell (1997)) cannot be maintained for Kiowa because Kiowa exhibits cases of SR in coordinated clauses. According to McKenzie, the conjunction *gàu* can be analyzed as a same subject marker whereas *nàu* is the different subject marker.

- (16) McKenzie (2011:58)
- a. Yísàum \emptyset =hébà gàu èm=sáú.
 Yisaum 3.SG=enter.PF and.SS 3.SG.REFL=sit.down.PF
 'Yisaum_i came in and he_i sat down.'
- b. Yísàum \emptyset =hébà nàu èm=sáú.
 Yisaum 3.SG=enter.PF and.DS 3.SG.REFL=sit.down.PF
 'Yisaum_i came in and he_{*i/j} sat down.'

Both clauses can be independently marked for all verbal categories, including evidentiality, tense and negation and there is no evidence that one verb is dependent on the other. So, there is no reason to doubt that this is a clear case of coordination. Apart from coordination, Kiowa also has SR marking in adverbial subordination clauses. However, as one can see, in these cases, the markers appear as verbal affixes and a different marker set is used.

- (17) À fóchân [èm=kóp-dáu-ménáu]
 1.SG see.arrive.PF 2.SG=sick-be-EVID=ADV.DS
 'I came to see you because (I heard) you were sick. Watkins (1993:141)

If one takes a closer look at the properties of the SR markers in Kiowa, one will find that Kiowa is another prototypical example of non-canonical switch-reference. In Kiowa, just like in Lakhota, for example, the choice of the marker is not solely conditioned by the referential identity of the subjects but rather by some discourse principles. In (18-a), there is, again, a change of scenery which causes DS marking. In (18-b) we find SS marking even though the subjects of both conjuncts are distinct if the two actions performed by the two different subjects serve the same purpose. McKenzie (2011) mentions a context in which both letters were written to the Governor on behalf of a prisoner. If the two letters written for independent reasons, DS marking would be obligatory.

- (18) a. Óp á=álé. nè=gáu óp jáuchò á=álé.
 There 3>3=chase-PF then=and.DS there instead 3>3=chase-PF
 'They chased it here and then they chased it this way' Palmer Jr. (2003)
- b. Kathryn gà=gút gàu Esther=àl gà=gút
 Kathryn 3>3=write.PF and.SS Esther=too 3>3=write.PF
 'Kathryn wrote a letter and Esther wrote one too.' McKenzie (2007)

However, just as in Yakunyjtjara and Pitjantjara, these cases of non-canonical switch-reference only occur in the context of coordinated clauses in Kiowa (McKenzie 2007). All instances of SR in subordinated clauses in Kiowa are canonical in the sense that only the referential identity of the respective subjects is relevant for the SR marker. A change of scenery, location, temporal relation, or shared purpose as we saw with the coordinated examples does not play a role with subordinate structures. I will come back to that observation in the following section.

The final language which I briefly want to discuss is Nêlêmwa, an Oceanic language of New Caledonia. McKenzie (2007, 2011) cites Nêlêmwa (Bril (2004)) as another language which exhibits cases of switch-reference in coordinated clauses. Nêlêmwa has a whole range of clausal conjunctions some of which may be inter-

preted as SR markers. In (19), one can see the use of the conjunction *na*, glossed as a DS marker, and *me*, glossed as a SS marker.⁴

- (19) a. **Na** na pek **me** na tu tharaxila-na mwaidu,
 And.DS 1.SG avoid and.SS 1.SG go.down jump-1.SG down.there
na hla thu tho-nuat **me** hla khabwe: [...]
 and.DS 3.PL make call-mouth and.SS say
 'But then, I avoid them and jump away and then they call and say:
 [...]'

According to Brill (2004), the conjunction *me* can also be used as a subordinating complementizer but this structural ambiguity can be resolved by using various tests like, for example, the scope of negative elements. Thus, it seems that Nêlêmwa is another language which exhibits SR marking in coordinated clauses.

And, just like in the languages above, we find cases of non-canonical switch-reference marking. The following example shows that *me* is also compatible with a DS reading. In these cases *me* expresses immediate sequentiality. Hence, Brill (2004) argues that the respective conjunctions encode topic (dis)continuity rather than referential identity, just like Dahlstrom (1982) did for Lakhota.

- (20) a. I_i oda Teâ Pwayili_i shi Teâ Ovaac_j me i_j khabwe [...]
 3.SG go.up Teâ Pwayili side Teâ Ovaac and.SS 3.SG say
 ushi-n a Teâ Ovaac_i...
 BEN-POSS.3.SG AGT Teâ Ovaac
 'Teâ Pwayili goes up to Teâ Ovaac and Teâ Ovaac tells him...'

4. Interim Summary

In the previous section, we have discussed all the languages which are said to have SR marking in clear cases of CP-coordination: Lakhota, Yakunyjtajara, Pitjantjajara, Kiowa and Nêlêmwa. What we have seen is a very homogeneous picture. The switch-reference constructions in all five languages behave exactly the same with respect to three different parameters.

- The five languages in question are the only ones where we find SR in coordinated clauses.

⁴The glosses are adapted for reasons of uniformity. Brill (2004) does not use these glosses but rather uses CONTR for contrastive and DEPEND for dependent which, as we will see, is in line with my argumentation in the next section.

- The five languages are the only ones in which the SR encoding morpheme is free and expressed as a conjunction between the two clauses.
- In all five languages we find an exorbitant use of non-canonical switch-reference marking.

It is remarkable that these three parameters are found in all of the five languages in question especially since each of them is very rare amongst languages exhibiting switch-reference. As was noted several times by now, the languages we discussed in the previous section are the only ones claimed to have SR marking in coordinated clauses (CPs). The vast majority of SR marking is found in clause chains and subordinate clauses. I mentioned the discussion about whether Amele is a case of clause chaining or real CP-coordination in a previous section but it seems that until new data shed light on this case, it is plausible to assume that Amele is not a clear case of SR marking in coordination. The second parameter, namely that in all five languages the SR morpheme is a free morpheme, is just as rare.⁵ We have seen that all five languages use free morphemes such as conjunctions to encode SR in coordinate clauses. But this is very uncommon as well. The vast majority of languages uses affixes attached to the verb to encode SR relations. For this reason, the standard assumption made by most researchers (e.g. Haiman and Munro (1983)) is that SR is a verbal category. Even more remarkable is that, as we have seen, three of the languages we discussed (Yakunytjatjara, Pitjantjatjara and Kiowa) make use of a verbal affix in cases of subordination but use a free morpheme in cases of coordination. The last observation is that all languages in question make use of what is called non-canonical SR, which means that in many cases the referential identity of both subjects is not the relevant criterion for SS or DS marking. Rather, we find that the markers often encode the continuity or discontinuity of the action. This factor is not widespread amongst SR languages either. It has been noted that some languages (see e.g. Amele (Roberts (1987)), Seri (Farrell et al. (1991)), Yuman (Langdon and Munro (1979)), Choctaw (Broadwell (1997))) exhibit special behavior with respect to certain constructions like raising of arguments in passive clauses or weather verbs. However, it seems that most of these construction- or verb-specific idiosyncrasies can be accounted for within a syntactic theory and hence are not to be seen as non-canonical. The vast majority of SR languages follow the canonical pattern which means that the choice of SS or DS marker solely depends on the referential identity. There might be some examples of other languages which look pretty much like the cases of non-canonicity we discussed (e.g.

⁵The only notable exception might be Pima. As Langdon and Munro (1979) note, the SR markers in that language are diachronically verbal but may appear as independent particles. However the data on that language are very scarce and need further examination.

SR in Mandan (Mixco (1997)). Thus, I do not want to claim that these five languages are the only ones which exhibit this non-canonical behavior, nevertheless it is remarkable that all of them do. And, as we have seen, again, it is only the SR marking in coordinated clauses in Yakunyŋtjatjara, Pitjantjatjara and Kiowa that is non-canonical. The subordinate SR marking is totally canonical.

It needs to be emphasized that the three parameters we observed are in principle completely independent from each other. One could easily imagine cases of SR marking in coordinated clauses which appears to be affixed to the first of the two verbs or instances of canonical SR marking which co-occur with coordinated structures or free morphemes. And since these parameters are cross-linguistically so rare and pretheoretically independent from each other, it would be a tremendous coincidence if all three of them co-occured in all the five languages we discussed. Hence, I argue that the cases which we saw are not to be subsumed under the label *switch-reference*. Rather, they constitute their own phenomenon which has nothing to do with SR marking as such. In doing so, one can resolve several problems at the same time. First, all the languages which we examined are no longer treated as some sort of weird exception to an otherwise pretty homegeneous phenomenon. If languages like Lakhota, Yakunyŋtjatjara, Pitjantjatjara, Kiowa and Nêlêmwa were no longer treated as instances of switch-reference, this would be much closer to the original intuition of Dahlstrom, Goddard and Bril who expressed their doubts about whether this is an instance of SR at all. The second major advantage is that the phenomenon switch-reference as such can be confined in several dimensions at once. On the one hand, one can dispense with the discussion about whether SR marking is a verbal category or not. Showing that all cases in which SR marking seems to be a free, non-verbal morpheme are actually a completely independent phenomenon allows us to narrow the definition of switch-reference down to cases of verbal marking. On the other hand, we finally do have an answer to the question raised in the title of this paper. I have argued that all the languages in question behave differently from all other languages which have SR marking with respect to three different parameters. Furthermore, it is remarkable that even within a single language the patterns are homogeneous: Coordinate clauses, free morphemes and non-canonical use of SR marking always co-occur and subordinate clauses, bound SR morphemes and canonical use co-occur as well. Hence, it seems plausible to assume that we are dealing with two different phenomena: Switch-reference on one hand and something else on the other hand. Thus, if one follows my argumentation, one can conclude that there is no language which has SR marking in coordinate clauses and the definition of the phenomenon switch-reference can be further restricted to cases of (adverbial) subordination and clause chaining.

So there is only one question remaining, namely the following: If the languages we discussed do not exhibit SR marking, what is it then? I will deal with this question in the following sections.

5. Tight and Loose Coordination

In the last section, I have argued that all the cases claimed to be SR marking in coordinated clauses have nothing to do with SR and that they are totally different in nature although the actual use of both strategies may, of course, overlap. In this section, I try to pave the way for a more accurate analysis of the phenomenon. One of the languages discussed above was Nêlêmwa, an Oceanic language of New Caledonia. McKenzie (2007, 2011) cites Nêlêmwa as another language with SR marking in coordination structures despite the fact that the researchers working in that area (e.g. Bril (2004) and Moysse-Faurie and Lynch (2004)) never claimed that Nêlêmwa makes use of SR marking. Bril (2004) and Moysse-Faurie and Lynch (2004) are probably more cautious making such claims because there is no Oceanic language known to have SR marking at all.

However, what Oceanic languages do have is an elaborate system of coordinating conjunctions which can already be traced back to earlier stages of Proto Oceanic (see Moysse-Faurie and Lynch (2004)). And an essential part of this elaborate system of conjunctions and coordination structures is the distinction between *tight* and *loose coordination*. Using the tight coordination conjunction expresses that both conjuncts are closely associated or some kind of natural pair. Loose coordination accordingly expresses that both conjuncts are loosely associated or accidentally paired.⁶ The difference can be seen with of noun phrase coordination.

(21) Paicî (Moysse-Faurie and Lynch (2004))

- a. pā nājà mā pàru
ART months and years
'months and years'
- b. i nã-wě bau i nã-wâjí
the taro.fields and the sugarcane.fields
'The taro fields and the sugarcane fields'

(22) Xârâcùù (Moysse-Faurie and Lynch (2004))

- a. gu mää ge
you and I
'you and I' (as a couple)
- b. gu mê ge
you and I
'you and I' (no strong interpersonal relationship)

⁶Haspelmath (2007) actually calls these two types *natural* and *accidental coordination*, however I stick to the terms *tight* and *loose coordination* because as Moysse-Faurie and Lynch (2004) note, these terms seem more appropriate for reference to verbal and clausal coordination.

In (21), *nājá* and *páruí* (months and years) constitute a natural pair while *nä-wě* and *nä-wâjí* (taro fields and sugarcane fields) do not. The same holds for (22). If both people denoted are a couple the tight coordinator is used, if not, the loose coordinator is used.

This kind of tight vs. loose NP-coordination is rather common among Oceanic languages but some languages also make use of this mechanism when it comes to VP-, or CP-coordination. However, with VP-coordination virtually all languages lost the distinction between tight and loose coordination, probably because VP-coordination often entails a tight coordination. Thus, in languages like Anejoñ, Paicî or Nemi, the same coordinator used for tight NP-coordination and VP-coordination.

- (23) È mwââ paá mê mä pūrö
 3.SG then take DIR and cook
 'She brings and cooks them' Paicî (Rivierre (1983))

Some languages, however, maintain the tight vs. loose coordination distinction across the board. Take the following examples from Tawala, a Western Oceanic language spoken in Papua New Guinea. In (24), we see the common distinction between tight and loose NP-coordination. *Our father* and *our mother* seems to be a more natural pairing than *his wife* and *his mother*.

- (24) ama-ta po hina-ta a kenduluma ma hina-na
 father-our and mother-our his wife and mother-his
 'Our father and our mother' 'His wife and his mother'
 Tawala (Ezard (1984))

But Tawala uses the exact same coordinators for clausal coordination. And just as with nominal coordination, *po* expresses the tighter relation and *ma* the looser one.

- (25) a. Apo a-ne-nae po a-ne-nae po u meyagai...
 FUT 1.SG-DUR-go and 1.SG-DUR-go and LOC village
 'I went and went and (came) to the village'
 b. I-na-togo a-mae ma i-na-dumol-i naka a-nae
 3.SG-POT-blow 1.SG-stay and 3.SG-POT-calm-3.SG that 1.SG-go
 'If it's windy I'll stay, but if it's calm I'll go'
 c. To-nae po hi-gohili-yai
 1.EXC.PL-go and 3.PL-surprise-1.EXL.PL
 'We went and they surprised us'
 d. Pona a-nonol-i ma gamo-u i-witai
 language 1.SG-hear-3.SG and mouth-1.SG 3.SG-heavy
 'I can hear the language but can't speak it' Ezard (1997)

According to Ezard, the difference between *po* and *ma* is the following: *Po* "indicates a close connection between two clauses - sometimes a repetition of the predicate, sometimes the identity of the subject, always agreement in polarity" whereas *ma* "marks a clause as being in contrast to the previous clause – a change of subject, mood or spatio-temporal setting, polarity" (Ezard (1997:247ff)).

This is actually the exact same thing as we saw in Lakhota, Yakunytjatjara, Pitjantjatjara, Kiowa and Nêlêmwa. The language specific parameters for when the contrastive conjunction is used may vary slightly, however, the overall pattern is identical. In each case, the contrastive conjunction marks a scene shift, a change of place and time or referents. However, in Tawala we can nicely draw the connection to show that these cases are not an instance of SR marking but rather an instance of the distinction between tight and loose coordination.

Another language where we find the the whole range of uses of both coordinators is Mangap-Mbula, also an Austronesian language spoken in Papua New Guinea. Take a look at the following examples:

- (26) a. mberj ma aigule
night and day
'Night and day.' or 'All the time'
- b. serembat mi tuumbu mi zeere...
Sweet.potato and pitpit and edible.green.plant
'Sweet potatoes, pitpit and edible green leaves...'
- c. Am-kan ma am-win mi am-keene.
1PL.EXCL-eat and 1PL.EXCL-drink and 1PL.EXCL-sleep
'We ate and drank and slept.'
- d. Aŋ-kam Aibike ma am-la mogleene.
1SG-get Aibike and 1PL.EXCL-go garden
'I took Aibike with me to the garden.'
- e. Ni i-miili mi guraaba kini i-la Koobo.
He 3SG-return and friend LOC.3SG 3SG-go Aramot
'He returned and his friend went to Aramot Island'

The tight coordinator *ma* is used in "formulaic" NP coordination (26-a), whereas coordination by the loose coordinator *mi* (26-b) is more "arbitrary" (Bugenhagen (1995:214)). When conjoining clause-chains (26-c), *ma* encodes "successive aspects of a single event" whereas *mi* encodes "distinct events" (Bugenhagen (1995:159)). With complete clauses ((26-d) and (26-e)), *mi* entails a change of scenery whereas *ma* does not.

- (31) Kiowa (McKenzie (2011:243))
- a. Hâjêl chói \emptyset -bâu gáu hâjêl chói-gul
 Who coffee 3.SG-bring.PAST and.SS who liquid-red
 \emptyset -bâu
 3.SG-bring.PAST
 'Who brought coffee and who brought tea?'
- b. Háundè bé-bâu gáu hágà bé-sép
 What 2SG->3-bring.PAST and.SS where 2SG->3-put-PAST
 'What did you bring and where did you put it?'

If clauses coordinated by the tight coordinator are in fact TPs in Kiowa, as Keine argues, then there would not be a landing site for *wh*-pronouns. Hence, we would expect that the tight coordinator could never conjoin questions, at least none with an overtly moved *wh*-pronoun.

One might save the syntactic account if one invoked the concept of Split-CPs (e.g. Rizzi (1997, 1999, 2002)). One could still argue that the tight coordinator conjoins a "smaller" constituent than the loose coordinator and at the same time provide a landing site for *wh*-pronouns in both clause types. However, in order to maintain Keine's argument, it is important that the calculation of situation variables takes place above the category which denotes a tight conjunct.⁷ It is to be determined whether such an analysis can be maintained. However, if the phenomenon of tight vs. loose coordination turns out to be a semantic or pragmatic one, this does not affect the main argumentation of this paper.

7. Theoretical consequences

In the preceding sections I argued that all the examples for SR marking in coordination structures are actually instances of a completely different phenomenon, namely tight- vs. loose coordination. As we have seen, the actual implementation is, to a certain extent, similar to the approach by Keine (this volume), who tries to analyze all instances of SR marking as tight- vs. loose coordination.⁸ However, it needs to be emphasized that I am not claiming that SR in general is to be analyzed in this way.

On the contrary, I tried to make an argument against the unification of SR phenom-

⁷van Craenenbroeck (to appear) gives several arguments for a CP analysis which is split in at least two segments and he argues that there are clauses in which the higher segment is not present.

⁸Keine, of course, does not explicitly use this term. Nevertheless, from his discussion, it becomes clear that the concept he proposes is very similar.

ena and tight- vs. loose coordination. The argument consisted in that one cannot derive why the applicability of SR marking in coordination structures always entails that the SR marking morpheme is a conjunction and that we find cases of non-canonical use of SR marking and vice versa. Note however that this argument does not exclude all theories that try to unify these two phenomena per se. If one theory can derive these correlations from each other or from an independent language factor, my argument would be invalidated. As far as I can see, both unifying theories that I know of (McKenzie (2011) and Keine (this volume)) are able to derive the correlation between the non-canonicity of SR marking and its appearance in the context of coordination. The correlation between the syntactic context and the morphological form however remains unexplained.

If all the cases where SR seems to apply in coordination structures were in fact instances of tight- vs. loose coordination, as I argued, then we would kill two birds with one stone. First, SR marking could uniformly be analyzed as a verbal category and second, the syntactic contexts would be restricted to (adverbial) subordination and cases of clause-chaining. This, as I discussed in the beginning of this paper, has great consequences for the research in the whole phenomenon of switch-reference marking. Clause-chaining constructions are still an extremely understudied topic and it is not yet clear how they should be analysed from a Minimalist perspective but whatever analysis one prefers, the extraction patterns in (7) and (8) suggest that there is some kind of c-command relation between the clauses of a clause-chain and the matrix clause. And since this c-command-relation is a prerequisite for several theoretical approaches to switch-reference such as the binding approaches (Finer (1984, 1985); Broadwell (1997); Watanabe (2000)) but also agreement-based approaches (Assmann (this volume) and Camacho (2010)) and movement-based approaches (Georgi (this volume)), all these approaches can claim to be cross-linguistically valid.

Bibliography

- Assmann, Anke (2012), Switch-Reference as Interclause tense agreement: evidence from Quechua, in P.Weisser, ed., 'Perspectives on Switch-Reference: Local Modeling and Empirical Distribution', Vol. 89 of *Linguistische Arbeitsberichte*, Universität Leipzig, pp. 43–84.
- Bowe, Heather J. (1990), *Categories, Constituents and Constituent Order in Pitjantjatjara*, London, New York: Routledge.
- Bril, Isabell (2004), Coordination and inclusory constructions in New Caledonian and Oceanic languages, in M.Haspelmath, ed., 'Coordinating Constructions', Amsterdam: John Benjamins, pp. 499–534.
- Broadwell, George Aaron (1997), Binding Theory and Switch Reference, in H.Bennis, P.Pica and J.Rooryck, eds, 'Atomism and Binding', Dordrecht: Foris, pp. 31–49.
- Bugenhagen, Robert (1995), *A Grammar of Mangap-Mbula: An Austronesian Language of Papua New Guinea*, Canberra: Research School of Pacific and Asian Studies, ANU. Pacific Linguistics.
- Camacho, José (2010), 'On Case Concord: The Syntax of Switch-Reference Clauses', *Natural Language and Linguistic Theory* 28 pp. 239–274.
- Chafe, W. (1976), Givenness, definiteness, contrastiveness, subject, topic and point of view, in C.Li, ed., 'Subject and Topic', Academic Press.
- Dahlstrom, Amy (1982), A Functional Analysis of Switch-Reference in Lakhota discourse, in K.Tuite, R.Schneider and R.Chametzky, eds, 'Papers from the Eighteenth Regional Meeting of the Chicago Linguistic Society', Chicago, CLS, pp. 72–81.
- Dooley, Robert A. (2010a), 'Exploring Clause Chaining', *SIL Electronic Working Papers in Linguistics* .
- Dooley, Robert A. (2010b), Foreground and Background in Mbyá Guaraní Clause Chaining, in K.McElhanon and G.Reesink, eds, 'A Mosaic of Languages and Cultures: Studies celebrating the career of Karl J. Franklin', SIL e-Books 19, pp. 90–110.
- Ezard, Bryan (1984), *The Tawala language: An introduction with helps for language learning*, Available Online: http://www.sil.org/pacific/png/pubs/51910/Tawala_Introduction.pdf.
-

- Ezard, Bryan (1997), *A grammar of Tawala: An Austronesian language of the Milne Bay Area. Papua New Guinea*, Canberra: Research School of Pacific and Asian Studies ANU. Pacific Linguistics.
- Farrell, Patrick, Stephen Marlett and David Perlmutter (1991), 'Notions of Subjecthood and Switch Reference: Evidence from Seri', *Linguistic Inquiry* 22 pp. 431–456.
- Finer, Daniel (1984), *The Formal Grammar of Switch Reference*, PhD thesis. University of Massachusetts. Amherst.
- Finer, Daniel (1985), 'The syntax of switch-reference', *Linguistic Inquiry* 16, 35–55.
- Georgi, Doreen (2012), Switch-Reference by Movement, in P.Weisser, ed., 'Perspectives on Switch-Reference: Local Modeling and Empirical Distribution', Vol. 89 of *Linguistische Arbeitsberichte*, Universität Leipzig, pp. 1–42.
- Goddard, Cliff (1985), *A Grammar of Yankunytjatjara*, Institute for Aboriginal Development Press.
- Gordon, Lynn (1983), Switch Reference in Maricopa, in J.Haiman and P.Munro, eds, 'Switch Reference and Universal Grammar: Proceedings of a Symposium on Switch Reference and Universal Grammar', Amsterdam: John Benjamins.
- Haiman, John and Pamela Munro, eds (1983), *Switch Reference and Universal Grammar: Proceedings of a Symposium on Switch Reference and Universal Grammar*, Amsterdam: John Benjamins.
- Haspelmath, Martin (2007), Coordination, in T.Shopen, ed., 'Language Typology and Syntactic Description', Cambridge University Press, pp. 1–51.
- Keine, Stefan (2012), Switch-Reference as Coordination, in P.Weisser, ed., 'Perspectives on Switch-Reference: Local Modeling and Empirical Distribution', Vol. 89 of *Linguistische Arbeitsberichte*, pp. 107–164.
- Keine, Stefan (to appear), 'Deconstructing Switch Reference', *Natural Language and Linguistic Theory* 31.
- Langdon, Margeret and Pamela Munro (1979), 'Subject and Switch-Reference in Yuman', *Folia Linguistica* 13, 321–344.
- Lynch, John (1983), Switch-reference in Ienakel, in J.Haiman and P.Munro, eds, 'Switch Reference and Universal Grammar: Proceedings of a Symposium on Switch Reference and Universal Grammar', Amsterdam: John Benjamins.

- McKenzie, Andrew (2007), Non-canonical switch-reference and situation semantics, in A. R. Deal, ed., 'Proceedings of the 4th Conference on the Semantics of Under-represented Languages of the Americas (SULA 4)', Amherst: GLSA, University of Massachusetts Occasional Papers in Linguistics.
- McKenzie, Andrew (2010), Subject Domain Restriction and Reference Tracking, in N. Li and D. Lutz, eds, 'Proceedings of Semantics and Linguistic Theory (SALT 20)', Ithaca: CLC.
- McKenzie, Andrew (2011), *The Role of Contextual Restriction in Reference Tracking (Draft)*, University of Massachusetts, Amherst.
- McKenzie, Andrew (in prep.), On certain switch-reference strategies. Manuscript.
- Mixco, Mauricio (1997), 'Mandan Switch Reference: A Preliminary View', *Anthropological Linguistics* 39(2), 220–298.
- Moyse-Faurie, Claire and John Lynch (2004), Coordination in Oceanic languages and Proto Oceanic, in M. Haspelmath, ed., 'Coordinating Constructions', Amsterdam: John Benjamins, pp. 444–499.
- Palmer Jr., Gus (2003), *Telling Stories the Kiowa Way*, Tucson, Arizona, Arizona University Press.
- Rivierre, Jean-Claude (1980), *La langue de Touho: Phonologie et grammaire du cèmuhi (Nouvelle-Calédonie)*, Paris, SELAF.
- Rivierre, Jean-Claude (1983), *Dictionnaire paicî-français (Nouvelle-Calédonie)*, Paris, Peeters.
- Rizzi, Luigi (1997), The Fine Structure of the Left Periphery, in L. Haegeman, ed., 'Elements of Grammar, Handbook of Generative Syntax', Kluwer, Dordrecht, pp. 281–331.
- Rizzi, Luigi (1999), 'On the Position "Int(errogative)" in the Left Periphery of the Clause', *Manuscript, University of Siena*.
- Rizzi, Luigi (2002), Locality and Left Periphery, in A. Belletti, ed., 'Structures and Beyond. The Cartography of Syntactic Structures.', Vol. 3.
- Roberts, John (1987), *Amele*, London: Croom Helm.
- Roberts, John (1988a), 'Amele Switch Reference and the Theory of Grammar', *Linguistic Inquiry* 19 pp. 45–63.

- Roberts, John (1988*b*), Switch-Reference in Papua New Guinea: A Preliminary Survey, in A.Pawley, ed., 'Papers on Papuan Linguistics 3'.
- Stirling, Lesley (1993), *Switch-Reference and Discourse Representation*, Cambridge University Press.
- van Craenenbroeck, Jeroen (to appear), 'Simple and Complex Wh-Phrases in a Split-CP', *Proceedings of the Chicago Linguistic Society* **43**.
- Watanabe, Akira (2000), 'Feature Copying and Binding: Evidence from Complementizer Agreement and Switch Reference', *Syntax* 3 pp. 159–181.
- Watkins, Laurel (1983), 'The discourse functions of Kiowa switch reference', *International Journal of American Linguistics* **59**, 137–164.