INTRODUCTION

Baule is a Kwa language spoken in Côte d’Ivoire by about 1.3 million people. Baule makes extensive use of constructions that contain two or more inflected verbs and no overt markers of coordination or subordination, such as the example in (1). Linguists have documented similar examples in a wide variety of languages and generally consider them to belong to a special class of constructions, referring to them as Serial Verb Constructions (SVCs).

(1) Be yi Konan fiteli kuman nun.¹
   3ps² move Konan extract-PAST hole in
   'They pulled Konan out of the hole'

The only cross-linguistic characterization of SVCs that enjoys non-controversial status is formulated in terms of what SVCs are not. SVCs are not coordination, nor are they constructions involving a verb combining with an infinitive, a particle, or an adverb. Although SVCs are best characterized by this negative description, in the literature the view prevails that constructions in this class have certain interesting, non-trivial commonalities that can be expressed positively. The aim of this paper is to formulate a generalization about SVCs that will contribute to this discussion.

Cross-linguistically SVCs are often characterized by argument sharing. Argument sharing refers to the descriptive generalization that subjects and objects of the initial verb in the SVC are interpreted as also being the logical arguments of following verbs, but are not overtly repeated. The facts of Baule motivate a division of SVCs into two classes according to how argument sharing of objects is effected. In Clause Chaining SVCs the fact that the object of the non-initial verb is missing can be attributed to an independent factor, namely the presence of an object pronoun with no phonetic content. Such null object pronouns are common in Baule and occur frequently in simple, non-serial constructions. In Integrated SVCs, the non-initial verb cannot occur with a null object pronoun in a simple verb construction. The missing object cannot be a garden variety null pronoun, but must rather be made possible by a mechanism specific to SVCs. The distinction between Clause Chaining SVCs and Integrated SVCs was proposed by Osam (1994) and further developed by Agyeman (2002) and Hellan, Beermann and Andenes (2003) for SVCs in Akan, a close cousin of Baule spoken in Ghana. This paper takes the distinction between Clause Chaining SVCs and Integrated SVCs as a point of departure.

Adopting the distinction between Clause Chaining SVCs and Integrated SVCs, however, commits us to the point of view that there are two types of missing object in Baule SVCs. In the

¹ The data discussed in this paper are from the Faafu ε variety of Baule, spoken in the area around Bouaké and were kindly provided by Clément Koffi from Tano-Sakassou, and Bernard Kouadio from Kouassiblekro.
² 3ps: 3rd person plural subject marker. Agreement markers are glossed with abbreviations following this pattern.
Clause Chaining SVC this missing object is a garden variety null object pronoun and in the Integrated SVC this missing object is an object gap licensed by a SVC-specific mechanism. This paper will demonstrate that, although there is basis in Baule for the distinction between Clause Chaining SVCs and Integrated SVCs, there is evidence for fundamental similarities between the null object pronoun of the Clause Chaining SVC and the SVC-licensed object gap of the Integrated SVC. This evidence suggests that missing objects in SVCs build a coherent class and should be differentiated from missing objects in simple, non-serializing constructions. I argue for the position that the two varieties of missing objects in Baule are null object pronouns occurring in simple verb constructions and null object pronouns occurring in SVCs.

The first section of this paper presents SVC data from Baule and demonstrates how these data can be divided neatly into Clause Chaining SVCs and Integrated SVCs. Examples are given from the different sub-classes of Integrated SVCs: Theme SVCs, Benefactive SVCs and Instrumental SVCs. The second section of the paper demonstrates that the difference between the missing objects in the two types of SVCs is illusive. Instead, I demonstrate that a null object pronoun is present in not only Integrated SVCs, but also in Clause Chaining SVCs. The null object pronoun in SVCs is special because it is dependent on the presence of preceding linguistic structure in the same construction. I conclude that missing objects in simple verb constructions are distinct from missing objects in both Clause Chaining SVCs and Integrated SVCs.

**Clause Chaining SVCs vs. Integrated SVCs in Baule**

The Baule examples in (1) (repeated) and (2) are both considered SVCs. As mentioned in the introduction, constructions are regarded as SVCs when they contain two finite verbs and no overt conjunction. The SVCs in (1) and (2) also exhibit argument sharing. The overt object of the first verb is understood to be the logical object of the second verb. I will demonstrate that SVCs can be neatly classified as either Clause Chaining SVCs or Integrated SVCs dependent on whether the second verb can also appear with a null object pronoun when used in a simple, non-serial construction.

(1) Be yi Konan fiteli kuman nun. (Integrated SVC)
   3ps move Konan extract-PAST hole in
   'They pulled Konan out of the hole.'

(2) o to nzue'n nɔnǐ. (Clause Chaining SVC)
   3ss buy water-DEF drink-PAST
   'S/he bought the water and drank it.'

Consider the second verb of the SVC in (1), *fite*, 'extract'. This verb does not subcategorize for a direct object, as demonstrated in (3).

(3) *Be fiteli Konan.
   3ps extract-PAST Konan

In a simple verb construction *fite* can never be interpreted as having a logical object. Example (4) can only mean 'They emerged' and cannot mean 'They extracted it.' In short, when used in a simple verb construction, *fite* is an intransitive verb.

(4) Be fiteli.
   3ps emerge-PAST
   'They emerged.'
To make the decision on how to classify (1), we first observe that *fite* cannot be followed by a null object pronoun in isolation, as was demonstrated by (4). From this fact we conclude that *fite* cannot be followed by a null object pronoun when used in a SVC. On this basis we make the decision to classify construction (1) as an Integrated SVC.

An obvious alternative to this analysis is that *fite* is always intransitive and that the SVC in (1) is underlyingly, 'They pulled Konan; he emerged from the hole.' The behavior of (1) when it is put into the negative, however, demonstrates that this alternative must be rejected. In the negative of the past tense, Baule requires the perfective to be used. In the perfective, the subject is required to be marked on each verb individually. The negative SVC corresponding to (1) is (5).

(5) B'a yi man Konan b'a *fite* man.
    3ps-PERF move NEG Konan 3ps-PERF emerge NEG
    'They didn't pull Konan out.'

In (5) *fite* carries a third person plural subject marker, which shows that its subject is identical with the third person plural subject of the first verb. If the subject of *fite* were Konan, a third person singular subject marker would be required. The facts of subject agreement demonstrate that *fite* is being used transitively in the SVC.

Contrast the behavior of *fite*, 'extract/emerge', with the behavior of the non-initial verb *nɔn*, 'drink', of the SVC in (2). As the discourse snippet in (6) illustrates, when *nɔn*, 'drink', occurs in a simple verb construction, it does not need to express its object overtly.

    2ss drink-PAST water-DEF yes 1ss drink-PAST
    'Did you drink the water?' 'Yes, I drank it/some.'

In fact, the answer to the question would be ungrammatical, if an overt third person object were used, as illustrated in (7).

(7) Een, n *nɔn* (*i).
    yes 1ss drink-PAST (*3so)
    'Yes, I drank it/some.'

To make the decision on how to classify (2) we first observe that *nɔn* can be followed by a null object pronoun in isolation, as demonstrated by (6). From this fact we conclude that it also can be followed by a null object pronoun when used in a SVC. On this basis we make the decision to classify construction (2) as a Clause Chaining SVC.

The verb *nɔn*, 'drink', is a so-called Object Drop verb, which means that its subcategorization requirements specify that it occur with a null object pronoun, whenever possible. Object Drop verbs are required to drop any pronominal object with an inanimate singular referent that occurs at the end of a clause. Pronouns which have animate or plural referents or pronouns that do not occur at the end of clauses are always overt. The verb *to*, 'buy', is another typical Object Drop verb and is used in the following examples to demonstrate that a sentence-medial object cannot be null.

(8) Aya toli.
    Aya buy-PAST
    'Aya bought it'
The fact that an Object Drop verb must drop an animate object is demonstrated in the following examples that contain \textit{kundɛ}, 'search for', another typical verb that requires object drop. In Baule animacy is not directly correlated to whether something is alive or not, humanness and volitionality also play a role in determining if something is regarded as animate. Human beings are always referred to with an overt pronoun, unaffected by infirmity or death. Animals are referred to with an overt pronoun if a certain volitionality is attributed to them. Example (11) can be used in a scenario in which I am searching for a chicken, that I assume has run away and hid itself. The chicken is considered animate and \textit{kundɛ}, 'search for', takes an overt object pronoun.

(11) \textbf{N kundɛli i}
\begin{tabular}{l}
1ss search-for-PAST 3so \\
'I searched for it (the chicken that ran and hid)'\end{tabular}

In a scenario in which I am searching for a chicken, which I assume has been hidden from me by mischievous children, the chicken is no longer animate, and the object pronoun is dropped, as illustrated in (12).

(12) \textbf{N kundɛli.}
\begin{tabular}{l}
1ss search-for-PAST \\
'I searched for it (the chicken the children hid)'\end{tabular}

The verb \textit{yra}, 'burn', is a so-called Overt Object verb. Such a verb prohibits object drop in all contexts. Overt Object verbs must overtly express their objects, as illustrated in (13).

(13) \textbf{N yrali *(i).}
\begin{tabular}{l}
I burn-PAST *(3so) \\
'I burned it'\end{tabular}

If the verb \textit{yra}, 'burn', is not followed by a direct object, it is interpreted intransitively.

(14) \textbf{N yrali.}
\begin{tabular}{l}
I burn-PAST \\
'I burned'\end{tabular}

The alternation between (13) and (14) makes it appear that the difference between Object Drop verbs and Overt Object verbs is not arbitrarily specified in the lexicon, but rather can be attributed to other semantic factors. Since \textit{yra}, 'burn', is a verb that undergoes the causative/unaccusative alternation, it seems like it is required to have an overt object so that its interpretation is not ambiguous. This explanation does not extend to other verbs of the class of verbs requiring overt objects, however. The verb \textit{wum}, 'to see', for example, requires an overt object, but has no corresponding intransitive form that would cause confusion, as illustrated in (15) and (16).

(15) \textbf{N wunni *(i).}
\begin{tabular}{l}
I see-PAST *(3so) \\
'I saw it.'\end{tabular}
The natural question that arises, is why it is possible for Baule to drop objects. Baule does not have object agreement, which is considered to license null object pronouns in other languages (Huang 1984). An interesting candidate for an account, is Farrell's (1990) account of Brazilian Portuguese. He claims that object drop is permitted in Brazilian Portuguese since null objects are necessarily third person, allowing enough of the null semantic content of the pronoun to be recovered. This account fits well with the facts of Baule, but does not explain why some verbs require object drop and some verbs prohibit it.

Rizzi (1986) argues that recoverability of content and therefore licensing of object pro in Italian is related to affectedness. In Baule the verbs *bu* 'break', *yra* 'burn', *yönön* 'shrink', *kun* 'kill', *fuan* 'chase away' all require an overt object. For this set of verbs the affectedness condition holds. The problem is, that the verbs *klo* 'like', *kp* 'hate', *si* 'know', *sro* 'fear', *wun* 'see', *kan* 'touch' also all require an overt object. These verbs do not have an affected object. In Larson (2002) I attempt a first characterization of the generalization that causes verbs to belong to one class or the other. For the purposes of this discussion, however, it is sufficient to assume that whether a verb requires or prohibits object drop is specified in the lexicon.

In the final section of the paper, I shall take issue with the validity of the assumption that verbs have exactly the same subcategorization possibilities in simple verb constructions as they do when used as the non-initial verb of a SVC. Subcategorization possibilities can be different for a verb as it occurs in a simple verb construction and as it occurs in a SVC, as long as certain constraints are respected. A readily evident constraint is that Overt Object verbs always require overt objects, independently of whether they are used in simple verb constructions or in SVCs, as will be demonstrated in the discussion of Theme-type Integrated SVCs. Before discussing the various types of Integrated SVCs, however, it is helpful to consider the dichotomy between Clause Chaining SVCs and Integrated SVCs in light of the discussion about SVCs in the Baule literature.

**Clause Chaining SVCs vs. Integrated SVCs in the Baule SVC literature**

The Baule literature that discusses SVCs (Creissels and Kouadio 1977, Timyan 1977, Carerton 1992, Kouadio 2000) does not explicitly differentiate between examples of the sort (1) and (2). Clause Chaining SVC examples like (2) are often not mentioned in the discussion of Baule SVCs. They are, for instance, noticeably absent in the comprehensive analysis of Kouadio (2000). The implicit consensus seems to be that Clause Chaining SVC examples like (2) are not really SVCs at all, but rather examples of Covert Coordination Constructions. Covert Coordination Constructions (CCCs) are asyndeton, that is to say, coordination constructions in which the conjunction is a null element, and are used frequently in Baule. An example of a CCC is illustrated in (17).

\[(17)\]  \(\diamond\) si alie 'n sôkô-li tro'n.  
\[3ss\] pound food-DEF prepare-PAST sauce-DEF  
'S/he pounded the futu and prepared the sauce'

The fact that Clause Chaining SVCs like (2) are distinct from Covert Coordination Constructions like (17) is demonstrated by the fact that the two constructions behave differently when the complement of one of the verbs is focused. Example (18) illustrates that the complement of the initial verb of a CCC may not appear in sentence-initial focus position.
Example (19) illustrates that it is perfectly grammatical for the complement of the initial verb of the Clause Chaining SVC in (2) to appear in sentence-initial focus position.

(19) Nzue'n ye o to nonni on.
water-DEF COMP 3ss buy drink-PAST PRT
'It's the water that she bought and drank.'

In the SVC literature Sebba (1987), Baker (1989) and Déchaine (1992) have been scrupulous about making the distinction between SVCs and CCCs using extraction tests. The extraction of a complement of one verb and not the other would constitute a violation of the Coordinate Structure Constraint (Ross 1967), and should cause ungrammaticality in coordination constructions, but not in SVCs. The Coordination Structure Constraint states that the conjuncts of a coordination form Islands for movement.

We need to be careful in applying this test to Baule. First, we have argued that there is a null object pronoun present following the non-initial verb in Clause Chaining SVCs. The focused element is thus related to both verbs in (19) and focus occurs Across-The-Board. No CSC-violation should be expected. If Clause Chaining SVCs are coordination constructions, no violation of the CSC should be expected.

Second, Baule requires resumption of focused elements by an overt pronoun in situ whenever the verb requires an overt argument. This fact suggests that the focus construction does not involve movement in Baule. Saah (1988) has argued that focus in Akan does not involve movement.

The contrast between (18) and (19) does not help us to distinguish between Clause Chaining SVCs and CCCs. The distinction, however, is perhaps not of central importance. In the second section of this paper I will demonstrate the existence of commonalities between Clause Chaining SVCs and Integrated SVCs, which will justify the decision, contra Kouadio (2000) to treat Clause Chaining SVC examples as bona fide SVCs.

This decision has an immediate, and interesting ramification. The non-initial verb in the Clause Chaining SVC in (2) is nooŋ, 'drink', a verb that was demonstrated in (6) to be transitive when used in a simple verb construction and to require a null object pronoun. Let us now make a minor modification to (2), in particular, substituting the non-initial verb with a verb that is also transitive when used in a simple verb construction, but which requires an overt object pronoun. We chose the verb kpusu, 'shake'. This verb is demonstrated in (20) to require an overt object pronoun when used in a simple verb construction.

(20) o kpusuli *(i).
    3ss shake-PAST 3so
'S/he shook it'

The resulting construction in (21) is like the Clause Chaining SVC in (2) in all respects except that the non-initial verb is followed by an overt object pronoun.

(21) o fa pandu'n kpusuli i.
    3ss take bottle-DEF shake-PAST 3so
'S/he picked up the bottle and shook it'
In (2) the object of the second verb nɔn, 'drink', is understood to be nzue'n, 'the water', the object of the first verb. In (21) the object of the second verb, kpusu, 'shake', is understood to refer to pandu'n, 'the bottle', the object of the first verb. This object is, however, expressed with an overt object pronoun. The complement of the initial verb can appear in the sentence initial focus position, as demonstrated in (22).

(22) Pandu'n ye ɔ fa kpusuli i ɔ.
    bottle-DEF COMP 3ss take shake-PAST 3so PRT
    'It's the bottle that s/he took and shook'

This fact demonstrates that the behavior of (21) is identical to the behavior of the Clause Chaining SVC (2), in which the non-initial verb is not followed by an overt pronoun. In order to be consistent in our classification of Clause Chaining SVCs, it is necessary to consider (21) also as a Clause Chaining SVC, despite the fact that there is an overt pronoun following the non-initial verb.

Although constructions such as (21) have not been discussed in the Baule literature, they were treated in Anyi, Baule's closest relative, in van Leynseele's (1975). In Anyi van Leynseele (1975) considers the presence of an overt object pronoun as grounds for discounting a structure as a SVC.

(23) cua ɔ ci akɔ ɔku i. (Anyi)
    dog catch chicken 3ss-kill 3so
    'The dog catches a chicken and kills it.'
    (van Leynseele 1975, ex. 1, p. 191)

According to van Leynseele (23) does not qualify as a SVC, since the non-initial verb is followed by an overt pronoun. There is a basic difference between Baule and Anyi that seems to have forced van Leynseele (1975) to this conclusion. In Anyi, an overt object pronoun cannot be present without a subject pronoun also being present (p. 192). Van Leynseele (1975) reports that a subject is required to be marked on every verb in the following example.

(24) ɔ fa ɔ batra, obia 3ss 3ss 3ss 3so 3ss 3so.
    take-HAB child 3ss wash-HAB 3so 3ss-annoint-HAB 3so
    'S/he takes the child, washes it, and anoints it.'
    (van Leynseele (1975), ex. 8 p. 192)

The corresponding Baule example requires a full subject morphology only on the initial verb.

(25) ɔ fa ba'n, wunzin i, kpakpa i. (Baule)
    3ss take child-DEF, wash 3so, anoint 3so
    'S/he takes the child, washes it and anoints it'

In Baule an overt subject marker is not required for an object pronoun to be overt. In fact Baule provides no independent contrast that would motivate differentiating (21) and (2). Instead the facts of Baule are better captured by assuming the standpoint that not all SVCs have argument sharing mediated by an empty category. Some SVCs have argument sharing mediated by an overt pronoun. I will consider (21) to be a SVC. As such, this example provides an illustration for my claim that there is a constraint on Overt Object verbs which requires these verbs to always use overt objects, independently of whether they are used in simple verb constructions or in SVCs.
Types of Integrated SVCs in Baule

The following examples demonstrate the various kinds of Integrated SVCs which exist in Baule. Each example is followed by the proof that it is an Integrated SVC and not a Clause Chaining SVC.

Theme SVCs

The designation Theme SVC is adopted from Law and Veenstra (1992). The shared argument is the theme of the two verbs in the SVC. The SVC in (1) is a Theme SVC. Example (26) is another example of a Theme SVC.

(26) M'an fɛ mɛn m'an fia man.
    1ss-PERF take NEG-3so 1ss-PERF hide NEG.
    'No, I didn't hide him.'

The second verb is associated with no overt complements, but is interpreted as having the object of the first verb as its logical object.

Since the SVC in (26) is negated, we can immediately confirm that the second verb *fia, 'hide*', is being used transitively and not intransitively. The non-initial verb is associated with a subject marker carrying the same person/number features as the subject.

The following examples demonstrate that *fia, 'hide*', does not subcategorize for a direct object when used alone.

(27) *N fiali Kofi.
    1ss hide-PAST Kofi

The verb *fia, 'hide*', can only be used without an object, as in (28). In this case, it can not be interpreted as associated with a null object, but has only the intransitive interpretation.

(28) N fiali.
    1ss hide-PAST
    'I hid.'
    '*I hid it.*'

Because *fia, 'hide*', cannot occur with a null object pronoun in a simple verb construction, any SVC in which this verb appears as a non-initial verb with a logical object is an Integrated SVC.

Hellan, Beermann and Andenes (2003) document a class of Integrated SVCs, which they designate as take-locate SVCs. Such examples are so-called switch sharing SVCs, since the object of the first verb is the subject of the second verb.

(29) Kofi de atadɛ no sɛn-n dadewa so (Akan)
    K. TAKE dress DEF hang-PST nail on
    'Kofi hung the dress on a nail'
    (Hellan, Beermann and Andenes 2003, ex. 4c. p. 7 from Stewart 1963, p. 148)

The verb *sɛn, 'hang*', in Akan can only be used intransitively in a simple verb construction.

The Baule equivalent of (29) is (30).

(30) N fali trale'n n sendeli pwan i su.
    1ss take-PAST dress-DEF 1ss hang-PAST nail 3so on
    'I hung the dress on the nail.'
Baule does not have switch sharing SVCs. The second verb of a Baule SVC always has the same subject as the first verb. It is interesting to note that where Akan uses a switch sharing SVC, Baule often does not need to. Example (31) demonstrates that the Baule verb sende, 'hang', can be used transitively in a simple verb construction.

**Instrumental SVCs**

Example (32) is an Instrumental SVC. The object of the first verb is understood to be the instrument by which the action of the second verb was performed.

(32) ° fa lalie'n kpeli kpaun'n.
    3ss take knife-DEF cut-PAST bread-DEF
    'S/he used the knife to cut the bread.'

Example (33) demonstrates that when the non-initial verb kpε, 'cut' is used in a simple verb construction it does not subcategorize for an instrumental argument.

(33) *° kpeli kpaun'n lalie.
    3ss cut-PAST bread-DEF knife

If there is no overt instrument, there is no instrument in the interpretation of the SVC.

(34) ° kpeli kpaun'n.
    3ss cut-PAST bread-DEF
    'I cut the bread.'

Example (34) can only mean 'I cut the bread' and never 'I cut the bread with it.'

The unacceptability of (33) is not due to a general ban on instrumental arguments in Baule. If the instrument is a human body part, it can be introduced by a complement. This fact is pointed out by Kouadio (2000).

(35) ° titi i sabwi.
    3ss scratch 3so nail
    'S/he scratches him/her/it.'

(Kouadio 2000, p. 87, ex. 56)

The non-initial verb of (32) does not subcategorize for an instrumental argument in a simple verb construction. Because kpε, 'cut', cannot be used with a null object instrument, the Instrumental SVC in (32) is an Integrated SVC.

**Benefactive SVCs**

Example (36) is a Benefactive SVC. The direct object of the first verb is interpreted to be the logical direct object of the second verb. The entity expressed by this direct object is understood to be transferred to the beneficiary, expressed by the overt complement of the second verb.

(36) Talua mun be fa fluwa'n manni mi.
    Girl  DEF-PL 3ps take book-DEF give-PAST 1so.
    'The girls gave me the book.'
When the second verb *man*, 'give', is used in isolation, it cannot be interpreted as having a null pronoun as an object. The example in (37) can only mean 'S/he gave me' and not 'S/he gave me it'.

(37)  ṙ mən n mi
   3ss give-PAST 1so
   'S/he gave me'

The inability of the verb *man*, 'give', to be interpreted this way in a simple verb construction is related to the fact that it is subject to the Definiteness Restriction (Stewart 1963). Verbs subject to the Definiteness Restriction in Baule are not allowed to occur with definite Direct Objects. There are two verbs subject to the definiteness restriction, *ce*, 'give as gift' and *man*, 'give'. These verbs can be used in simple verb constructions when they have direct objects that are not marked with the definiteness marker, as in (38)a.

(38)a. N mən n Kofi i fluwa
   1ss give-PAST Kofi 3so book/paper
   'I gave Kofi paper'

These verbs cannot be used in isolation when the object is definite, as illustrated in (38)b.

(38)b. *N mən n Kofi i fluwa'n (Definiteness restriction Stewart1963)
   1ss give-PAST Kofi 3so book/paper-DEF

The fact that *man*, 'give', used in a simple verb construction as in (37) cannot be interpreted as being followed by a null object pronoun can be attributed to the Definiteness Restriction. The null object is a definite pronoun and thus has definite reference, just like the overt noun phrase *fluwa'n*, 'the paper', in (38)b.

The verb *kle*, 'to show', is also used as the second verb in Benefactive SVCs.

(39)  ṙ kan nde'n kle li mi
   3ss say word-DEF show-PAST 1so
   'S/he explained the matter to me'

This verb does not have the Definiteness Restriction and can be used in a simple verb construction with a definite object. It is the only ditransitive in Baule not subject to the Definiteness Restriction.

Baule speakers report, however, a difference between SVCs and simple verb constructions using *kle*, 'to show'.

(40)  ṙ fa akə kle mi.
   3ss take chicken show me
   'He showed me chickens'

(41)  ṙ kle mi akə.
   3ss show me chicken
   'He showed what a chicken is'

These examples demonstrate that there is a difference between the interpretation of the direct object of *kle*, 'to show' when used in a simple verb construction and when used in a SVC.

The next section takes a closer look at the dichotomy between Clause Chaining SVCs and Integrated SVCs that I have elaborated here, uncovering fundamental similarities. These similarities motivate a refined account of Baule SVCs.
SIMILARITIES BETWEEN CLAUSE CHAINING SVC AND INTEGRATED SVC IN BAULE

The first section of this paper has demonstrated that Baule SVCs can be divided into two categories, according to whether their shared objects can be analyzed as garden variety null object pronouns or not. This dichotomy of Baule SVCs would have a greater explanatory value, if another difference correlated with the difference between Clause Chaining SVCs and Integrated SVCs. I have not succeeded in identifying another such difference. Similarities between Clause Chaining SVCs and Integrated SVCs, on the other hand, are readily identified. This section looks at similarities between Integrated SVCs and Clause Chaining SVCs and in particular between the missing objects involved in each. I conclude that both Integrated SVCs and Clause Chaining SVCs have missing arguments which are structurally present and are best analyzed as null objects. The null objects of SVCs demonstrate a dependency on linguistic material preceding them in the construction. In this way the null objects of SVCs differentiate themselves from the garden variety null objects of simple verb constructions, which are not constrained in this manner.

An immediately apparent similarity between Clause Chaining SVCs and Integrated SVCs is that in both constructions, tense/aspect as well as subject may be optionally marked on both verbs, as illustrated in (42)-(45).

(42) cf. (2) o to(li) nzue'n (o) nɔnni. (Clause Chaining SVC) 3ss buy(PAST) water-DEF (3so) drink-PAST 'S/he bought the water and drank it'
(43) cf. (21) o fa(li) pandu'n (o) kpusuli i. (Clause Chaining SVC) 3ss take(PAST) bottle-DEF (3so) shake-PAST 3so 'S/he picked up the bottle and shook it'
(44) cf. (32) o fa(li) laliε'n (o) kpele kpaun'n. (Integrated SVC) 3ss take(PAST) knife-DEF (3so) cut-PAST bread-DEF 'S/he used the knife to cut the bread'
(45) cf. (39) o kan(ni) ndε'n (o) kleli mi. (Integrated SVC) 3ss say(PAST) word-DEF (3so) show-PAST 1so ‘S/he explained the matter to me’

This similarity is not particularly surprising, since, as mentioned above, optionality of subject marking is characteristic for Baule. Optional tense/aspect and subject marking on both verbs also characterizes Covert Coordination Constructions, as illustrated in (46).

(46) cf. (17) o si(li) alicε'n (o) sɔkɔ-li tro'n (Covert Coordination) 3ss pound-PAST food-DEF (3so) prepare-PAST sauce-DEF 'S/he pounded the futu and prepared the sauce'

As demonstrated in the previous section, verb complements must be focused in order to bring out the difference between CCCs and SVCs. Examples (42) and (43) demonstrate that the direct object can be focused independently of the repetition of the tense and the subject of the second verb.

(47) cf. (42) Nzue'n ye o to(li) (o) nɔnni ɔn. water-DEF COMP 3ss buy(PAST) (3ss) drink-PAST PRT 'It's the water that she bought and drank.'
With Integrated SVCs the complements of the two verbs can also be focused. Examples (49) and (50) demonstrate that with an Instrumental SVC, either the theme or the instrument can be focused.

(49) cf. (44) Lali'n ye o fa(li) (o) kpeli kpaun'n on. knife-DEF COMP 3ss take-PAST (3ss) cut-PAST bread-DEF PRT
'It's the knife she used to cut the bread.'

(50) cf. (44) Kpaun'n ye o fa(li) (o) lali'n kpeli o. bread-DEF COMP 3ss take-PAST (3ss) knife cut-PAST PRT
'It's the bread that she cut with the knife.'

Examples (51) and (52) demonstrate that with a benefactive SVC, either the beneficiary or the theme can be focused.

(51) cf. (45) Ndε'n ye o kanni (o) kleli mi on. word-DEF COMP 3ss say-PAST (3ss) show-PAST 1so PRT
'It's the matter that s/he explained to me.'

(52) cf. (45) Mi ye o kan-ni ndε'n (o) kleli mi on. 1so COMP 3ss say-PAST word-DEF (3ss) show-PAST 1so PRT
'It's me that she explained the matter to.'

Examples (53) and (54) demonstrate that in a Covert Coordination Construction, neither the complement of the initial verb nor of the non-initial verb may be focused.

(53) cf. (46) *Ali'e'n ye o sili (o) sɔkJi tro'n on. food-DEF COMP 3ss pound-PAST (3ss) prepare-PAST sauce-DEF PRT
'It's the futu that s/he pounded and prepared the sauce.'

(54) cf. (46) *Tro'n ye o sili ali'e'n (o) sɔkJi o. sauce-DEF COMP 3ss pound-PAST food-DEF (3ss) prepare-PAST PRT
'It's the sauce that s/he prepared and pounded the futu.'

These examples establish that SVCs all share common characteristics. There are three facts that suggest that the missing object of Integrated SVCs is a garden variety null pronoun, such as is found in Clause Chaining SVCs.

The first fact is that the missing object of Integrated SVCs can bind a reflexive. If Binding is understood as a diagnostic of a structurally present element, as in Rizzi 1986, it is not possible to claim that Integrated SVCs do not contain an empty category.

The following example demonstrates that each verb forms its own governing category and that the governing category for the object of the second verb is not the entire SVC.

(55) o_i fali Kofi_j (o_i) kunni i wun i/*j
3ss take-PAST Kofi (3ss) kill-PAST 3so-self
'S/he took Kofi and killed him.'

This example only has the meaning 'S/he used Kofi as a means to commit suicide.'
This example seems to contradict the pattern of Instrumental SVCs. In order to say 'You can't use a knife to cut itself', you must use a reflexive Instrumental, as illustrated in (56).

(56) Be fa man laliεj (be) kpε men i wunεj 3ps take-HAB NEG knifeεj (3ps) cut-HAB NEG 3so selfεj
    'You can't use a knife to cut it.'

(57) Be fa man laliεj (be) kpε men i*j/k 3ps take-HAB NEG knifeεj (3ps) cut-HAB NEG 3so*j/k
    'You can't use a knife to cut it.'

Example (57) shows that an object pronoun cannot be co-referent with the object of the first verb. The reason for this pattern is that the Baule reflexive is bound by the closest antecedent and that there is an empty object in the second VP that is co-indexed with the object of the first verb and is acting as an antecedent for the reflexive.

The same pattern emerges with Benefactive SVCs. The following Benefactive SVC I claim contains a missing object associated with the second verb. This missing object is shown to be capable of binding a reflexive in (58).

(58) /i fali (i) kleli i wun*i/j nyannun'n nun. 3ss take-PAST Kofi (3ssi) show-PAST 3s-self*i/j mirror in 'She took Kofi and showed him himself in the mirror'
    *'She took Kofi and showed herself in the mirror'

An account of SVCs under which the object sharing effect arises at an interpretational rather than structural level, can be excluded on the basis of the fact that missing objects in Integrated SVCs can bind reflexives.

The second fact demonstrating that Integrated SVCs contain null object pronouns concerns E-type interpretations. An analysis under which the missing objects of Integrated SVCs are null pronouns is further supported by the fact that they receive E-type readings. This test originates with Baker and Stewart (2002), who use the occurrence of E-type readings to diagnose the presence of null pronouns in Edo SVCs.

E-type readings occur when a pronoun has a quantifier antecedent that does not c-command it. An E-type reading of a pronoun contrasts with a bound reading. This contrast was pointed out by Evans (1980) who introduced the term E-type pronoun.

A construction with an E-type pronoun can be distinguished from a construction with a bound variable pronoun by two properties. First, the scope of the quantifier antecedent does not extend into the clause containing the pronoun. Second, the E-type pronoun has a maximal interpretation, it refers to all of the entities in the range of the quantifier. These two properties are again from Evans (1980).

Consider the Integrated SVC in (59) in which the object of the initial verb is a quantifier.

(59) N fali fluwa nyon ke n manni Kofi. 1ss take-PAST book two only 1ss give-PAST Kofi.
    'I only gave Kofi two books'

First, we consider the first test for an E-type reading. If the missing object of the non-initial verb received a bound reading, the scope of the quantifier would extend to the entire SVC, and the SVC would have the interpretation that there are only two books such that I both took them and gave them to Kofi. Example (59) does not have this interpretation, however. Rather it has the
interpretation that I took only two books in total and that those two books I took, I gave to Kofi. We see that the scope of the quantifier antecedent does not extend into the clause containing the missing object, which tells us that the missing object gets an E-type reading.

Next, we consider the second test for an E-type reading. If the missing object of the non-initial verb received a bound reading, it would be possible that I gave to Kofi less than the entirety of the books that I took. Example (59) does not have this interpretation, however. Rather it has the interpretation that all of the books that I took I also gave to Kofi. Since the missing object has a maximal reading, we know that we are dealing with an E-type reading.

Notice that the null object involved in Clause Chaining SVCs also gets an E-type reading, as expected.

(60) N toli fluwa nyon ke n kanganni.
    1ss buy-PAST book two only 1ss read-PAST
    ‘I only bought two books and read them’

Example (60) has only the interpretation that there were a total of two books that I bought, and that both of those books I read. The null pronoun object of the non-initial verb thus receives an E-type reading.

Applying Baker and Stewart's (2002) line of argumentation, I conclude that the missing object of Integrated SVCs is a null pronoun. An E-type reading would not be possible if the missing object of the non-initial verb of the SVC were not a null object pronoun.

The third fact demonstrating that the missing object in Integrated SVCs is a null pronoun concerns Control. Control constructions are constructions in which empty categories occur that are required to be c-commanded by a co-indexed noun phrase. The following two examples demonstrate that such a noun phrase is not required in Baule SVCs to license missing objects.

In example (61), taken from a Baule reader, the shared argument, a third person singular pronoun, is a complement of a postposition and not of the initial verb.

(61) "...yeɔ tu i bo kle i." (Man e suan kangganlɛ p. 27)
    and 3ss pull 3so bottom show 3so
    ’...and s/he explains it thoroughly to him.’
    (In this case it is a lesson that is being explained to a student)

The shared object does not c-command the missing direct argument of the second verb. If c-command is assumed to be required for Control, (61) cannot be a Control structure.

Example (62) is taken from another Baule reader. Such examples are common, and demonstrate that the missing object of the second verb need not be co-referent with an argument of the first verb, but rather may refer to the entire event expressed by the first verb.

(62) "Man be sun kle Jésus-Christ." (Nyanndra Fluwa p. 24)
    COMP 3pp cry show Jesus Christ
    'Let them cry and show Jesus Christ.’

Example (62) demonstrates that the missing argument in a SVC is not subject to Control, since in this example there is no noun phrase present to act as a controller. This evidence provides further support to my argument that Integrated SVCs are not characterized by a special mechanism specific to SVCs.

We have seen that there is evidence that the missing object of the non-initial verb of Integrated SVCs is a null pronoun. The null pronoun of the Integrated SVC cannot occur in a simple verb.
construction, however, and can only occur in a SVC. This fact differentiates the null pronoun of the Integrated SVC from the garden variety null pronoun in Baule. The situation could be characterized descriptively with the observation that an Integrated SVC contains a null pronoun that is dependent on the presence of preceding linguistic material in the same construction.

Note that examples like (61) and (62) prevent us from a tighter formulation of this generalization. We cannot state that the null pronoun is dependent on the presence of an co-indexed or c-commanding noun phrase.

The remainder of this paper is devoted to demonstrating the null pronoun present in Clause Chaining SVCs is also characterized by the fact that it is dependent on preceding linguistic material in the construction. Two pieces of evidence will demonstrate that the null pronoun involved in SVCs is different than the null pronoun found in simple verb constructions in Baule, whose distribution is not constrained by such a dependence.

The first piece of evidence that distinguishes the missing object which follows the non-initial verb of a Clause Chaining SVC from a garden variety null pronoun in a simple verb construction deals with the obligatory expression of features of animacy and plurality. As a general rule, a third person plural pronoun in Baule is required to be overt when following a verb in a simple verb construction. The verb *kangan*, 'read', is an Object Drop verb, as demonstrated in (63).

(63) N *kangan*. 
   1ss read-PAST 'I read it.'

Example (64) demonstrates that consistent with the behavior of Object Drop verbs, the direct object pronoun must be overt if it designates a plural.

(64) N *kangan* be. 
   1ss read-PAST 3po 'I read them.'

These constraints are no longer absolute, however, in a SVC. Example (65) shows that if *kangan*, 'read' is used as the non-initial verb in a SVC, an overt pronoun referring to a plural is optional.

(65) N to fluwa mun n *kangan* (be). 
   1ss buy book DEF-PL 1ss read-PAST (3po) 'I buy the books and read them.'

This pattern is not expected, if the object pronoun in a SVC is exactly the same entity as the object pronoun in a simple verb construction.

In the first section of the paper, I stated that there are some constraints on the occurrence of overt pronouns that must carry over from simple verb constructions to SVCs. I showed that Overt Object verbs always require overt objects, independently of whether they are used in simple verb constructions or in SVCs. Another constraint is clearly at work in (65). Although the plural pronoun is optional in sentence final position, it must be overt when it occurs sentence medially. This pattern is illustrated in (66).

(66) N to fluwa mun n *kangan* *(be) ndende. 
   1ss buy book DEF-PL 1ss read *(3po) quickly 'I buy the books and read them quickly.'

Clause Chaining SVCs contrast with Integrated SVCs in this respect. It is impossible for the pronoun ever to occur overtly in Integrated SVCs, even if it is sentence medial.
Example (67) is another example like (65) that illustrates the same optionality of a plural pronoun following the non-initial verb of a Clause Chaining SVC.

(67)  N to gato nsan mun n dili (be)
     lss buy cake three DEF-PL lss eat-PAST (3po)
     'I bought three cakes and ate them.'

Example (68) deviates somewhat from this pattern, suggesting that lexical variation is an important factor. The verb *sie*, 'arrange', is an Object Drop verb, as demonstrated in (68),

(68)  N sieli.
     lss arrange-PAST
     'I arranged it'

Example (69) demonstrates that, consistent with the behavior of Object Drop verbs, the direct object must be overt if it designates a plural.

(69)  N sieli be.
     lss arrange-PAST 3po
     'I arranged them'

If *sie*, 'arrange' is used as the non-initial verb in a SVC, as in (70), it cannot be followed by an overt pronoun, even if the direct object is plural.

(70)  N to gato nsan mun n sieli (*be).
     lss buy cake three DEF-PL lss arrange (*3po)
     'I bought three cakes and arranged them.'

The pronoun reemerges if the object is no longer sentence final.

(71)  N to gato nsan mun n sieli *(be) kesi'n nun.
     lss buy cake three DEF-PL lss arrange *(3po) chest-DEF in
     'I bought three cakes and put them in the chest.'

Baule speakers report that if the pronoun following the non-initial verb in (70) is overt, it is interpreted as a beneficiary. In other words, if *be*, 'them', is present, (70) means 'I bought three cakes and arranged them for them.' Quite possibly it is only the presence of this interfering interpretation that causes the pronoun to be excluded in (70).

An Object Drop verb is required to have an overt object pronoun, when that pronoun refers to an animate. Example (72) demonstrates that *menn*, 'swallow', is an object drop pronoun.

(72)  o menni.
     3ss swallow-PAST
     'S/he swallowed it.'

When the referent is animate the object must be overt, as illustrated in (73).

(73)  o menni i.
     3ss swallow-PAST 3so
     'S/he swallowed him/her.'

The SVC in (74) demonstrates that when it is used in a SVC and when the referent is animate, the direct object pronoun is no longer required to appear, but is optional.
Again, whether the pronoun is optionally or obligatorily absent in such situations differs from example to example. A Baule SVC can optionally double the initial verb. Typically the verb that gets doubled is *fa, 'take'.

(75) ɔ fa(li) fluwa'n fa manni Kofi.  
3ss take(PAST) book-DEF take give-PAST Kofi  
'S/he gave Kofi the book.'

Such doubling is demonstrated to be a stacking of SVCs by the fact that the doubled verb can carry tense/aspect inflection, like any other full verb.

(76) ɔ fa(li) fluwa'n fa(li) manni Kofi.  
3ss take(PAST) book-DEF take(PAST) give-PAST Kofi  
'S/he gave Kofi the book.'

If the initial verb of a SVC is doubled, the second occurrence cannot be followed by an overt pronoun, even if the referent is animate.

The verb *fa, 'take', is an object drop verb, as demonstrated in (77). Example (78) demonstrates that, consistent with the behavior of object drop verbs, the direct object must be overt if it designates an animate. The vowel change in (78) is an assimilation effect.

(77) N fali.  
1ss take-PAST  
'I took it'  

(78) N fel i.  
1ss take-PAST 3so  
'I took him/her'

In example (79) the theme is animate, yet there is no overt pronoun following the doubled *fa.

(79) N fali mi wa'n fa(li) manni Kofi.  
1ss take-PAST 1so child-DEF take(PAST) give-PAST Kofi  
'I gave my child to Kofi'

If such a pronoun is added, the sentence becomes ungrammatical.

(80) *N fali mi wa'n fe(li) i manni Kofi.  
1ss take-PAST 1so child-DEF take(PAST) 3so give-PAST Kofi  

The behavior of a verb's pronominal object is different depending on if the verb is used in a simple verb construction or if it is used as the non-initial verb of a SVC. These examples suggest that an object pronoun in a SVC is not required to overtly express plural or animacy features like an object pronoun in a simple verb construction is. Features of plurality and animacy are expressed on the direct object of the initial verb, which is either a full noun phrase or a pronoun. These features seem to also satisfy the requirement for expression of features on the co-indexed pronoun object of the non-initial verb.

The second piece of evidence that distinguishes the null object that follows the non-initial verb of a Clause Chaining SVC from a garden variety null pronoun in a simple verb construction deals
with the range of reference possibilities. The generalization seems to be that the pronominal object of the second verb of the SVC, be it overt or covert, can never have obviate reference.

Imagine a context where you had recommended that a friend eat an apple peel to cure a particular ailment. You inquire if the friend followed up on your advice, by asking her mother about the apple peel. It is not possible that the Baule SVC in (81) could be used as a reply to your inquiry. Example (81) means 'S/he bought the apple and ate it (the apple)' and can never mean 'S/he bought the apple and ate it (the peel).'

(81) ə toli ɾɔm dili.
3ss buy-PAST apple ate-PAST.
'S/he bought an apple and ate it.'

The Baule SVC contrasts with an English coordination construction which uses an overt pronoun. The following discourse snippet sets up a context where it is possible for the object of the second conjunct *it* to refer to the peel and not to the apple, which is the object of the first conjunct.

(82) Q: Did she eat the apple peel I told her to eat?
A: I saw her buy a bag of apples and eat it.

The following example shows that the null object pronoun in Integrated SVCs is also constrained in the same manner. Imagine a context where you have a package of cough drops in which there was only one cough drop left. If you inquire what happened to that last cough drop, the SVC in (83) can not be an answer. Example (83) cannot mean, 'She took the package and gave it (the cough drop) to Bernard,' but rather only 'She took the package and gave it (the package) to Bernard.'

(83) ə fali ɓole ɛmanni Bernard.
3ss take-PAST package give-PAST Bernard
'S/he gave the packet to Bernard.'

Again, in this way the null pronouns in Baule SVCs are different from pronouns in the second conjunct of English coordination constructions. The following dialogue snippet indicates that if the correct context is established, a pronoun in the second conjunct can be understood to refer to something other than the object of the first conjunct.

(84) Q: Did she give Bernard the last cough drop?
A: Yes, I saw her take the packet and give it to Bernard.

These examples demonstrate that the missing object in SVCs has a referential dependence on preceding linguistic structure. This referential dependence is not shared by the garden variety null pronoun, which can refer to a discourse entity, given the right context. The garden variety null pronoun behaves like the overt object pronoun in the second conjunct of a coordination construction in English, which can allow reference to a discourse entity. This possibility is not open to the missing object of the second verb in the SVC. This behavior distinguishes the null object in a SVC from a garden variety null object.

**CONCLUSION**

In this paper I have demonstrated that Baule Serial Verb Constructions can be classified as either Clause Chaining SVCs and Integrated SVCs. In a Clause Chaining SVC the non-initial verb is an Object Drop verb and the argument sharing effect can be attributed to the presence of a null
object pronoun following this verb. An Integrated SVC effects object sharing with a SVC-specific mechanism. Although this taxonomy allows insight into the mechanics of the Baule SVC, it does not tell the complete story.

The distinction between Clause Chaining SVCs and Integrated SVCs does not explicitly capture extensive commonalities among Baule SVCs. Both Clause Chaining and Integrated SVCs allow subject and tense/aspect morphology to appear on both verbs. Both allow complements of either verb to appear in sentence-initial focus position. Such commonalities suggest that an account of Baule SVCs should not attribute the difference between Clause Chaining SVCs and Integrated SVCs to radically different devices.

The fact that a missing object of Integrated SVCs can bind reflexives and the fact that it receives an E-type reading when co-referent with a quantified noun phrase, demonstrate that it is structurally present in the SVC. An account of SVCs under which the object sharing effect arises at an interpretational rather than structural level, can be excluded on the basis of these facts. The missing object does not require the presence of a c-commanding or a co-indexed noun phrase. For this reading the missing object does not submit gracefully to being analyzed as a case of Control.

This evidence points to the conclusion that the missing argument of Integrated SVCs is a bona fide null pronoun, just like the missing argument of Clause Chaining SVCs. The difference is that in the Clause Chaining SVC case, the non-initial verb can also license a pronoun in a simple verb construction. In the Integrated SVC case, the verb must be used as the non-initial verb in a SVC in order for the null object pronoun to be licensed. The following descriptive generalization can be formulated. The null object pronoun of the Integrated SVC is dependent on the presence of preceding linguistic material in the same construction.

Strikingly this generalization also seems to hold of the null pronoun contained in the Clause Chaining SVCs as well. Two characteristics of the null pronouns of Clause Chaining SVCs support this assertion. First, the null object pronoun following the non-initial verb of the SVC seems freed of the constraint requiring it to express animacy or plurality. The null object pronoun is subject to such a constraint if used in a simple verb construction. Instead, the features of animacy or plurality expressed on the noun phrase following the first verb are sufficient to fulfill the requirement on the co-indexed null object pronoun following the second verb. Second, the null object pronoun of the Clause Chaining SVCs is different from the garden variety null pronoun in that it is unable to refer to an entity in the discourse context. Rather the null object must derive its reference from preceding linguistic material present within the same construction. Distinguishing two varieties of missing objects in Baule, namely, null object pronouns occurring in simple verb constructions and null objects occurring in SVCs, helps to shed light on the phenomenon of serialization.

**REFERENCES**


C.M.A. 19??. Nyanndra Fluwa: Contes et legen des en Baoulé. Bouaké: C.M.A.


