Clause chaining and conjugations in Wolof: a typology of parataxis and its semantics

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Abstract

Due to the specificity of its verb conjugation system, Wolof (Senegal) favors parataxis for clause combining and provides an interesting case where interclausal dependency can be marked by forms indicating information hierarchy. Furthermore, the study of clause combining shows that, with some restrictions on possible combinations, the various combinations of conjugations (or Tense-Aspect-Modality markers) produce different but regular interclausal meanings, such as succession, causality, opposition or consecution. Moreover, due to the nature of the different conjugations, paratactic clause chaining in Wolof yields different types of interclausal dependency, defining a gradient of syntactic integration: from simple assertive juxtaposition to more integrated syntactic dependency, through lesser known types of dependency, defined here as 'situational dependency' and 'pragmatic dependency'.

Keywords: parataxis, clause chaining, verb inflection, focus, pragmatic and situational dependency, Wolof

Introduction

Wolof is spoken by approximately ten million speakers mainly in Senegal and belongs to the Northern Atlantic branch of the Niger Congo family. It has a complex and interesting verbal system expressing, among others, (1) distinctions related to information hierarchy (focus), and (2) what I have dubbed "situational dependency". Another characteristic of this language, which is probably related to this particular verbal system, is the tendency in Wolof to express complex sentences paratactically, i.e. by juxtaposing clauses in a single sentence without any coordinating or subordinating morphemes. Subordinating morphemes do exist in the language (cf. Sall 2005[1]) but the specific properties of its conjugations naturally allow certain types of interclausal relations to be expressed by simple parataxis and conjugation chaining.

In this paper[2], I will present an overview of the morphosyntactic and semantic patterns observed in paratactic clause chaining; I will try to account for their constraints and regularities, and to define the nature of the specific types of dependency generated by clause chaining in the different conjugations. We will proceed from the less to the more integrated

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[1] A. Sall's work is the only comprehensive study of subordination in Wolof. It provides a detailed syntactic analysis of the various subordinate clauses attested in this language (complement clauses, relative clauses and various adverbial clauses), including an overview of the semantic functions of the subordinate clauses and of the constraints on the verbal forms used in these clauses. Most of this study is devoted to dependent clauses introduced by subordinating (or coordinating) morphemes, but it also contains some parts on paratactic structures. That is why, although A. Sall's perspective is quite different from mine in this article (in particular because she does not intend to analyze the role of the conjugations in the semantic value of clause combination), I will refer to her work occasionally.

[2] My deepest thanks go to my two reviewers, Kevin Moore and Maarten Mous, for their valuable comments on an earlier version of this paper.

interclausal linkages. The study will be limited to clause combining inside the sentence, sometimes extended to questions and answers in dialogue or clause chaining in discourse, but always considering only two adjacent clauses. While not extending to the macrostructuration into paragraphs, this level of analysis already reveals remarkable phenomena. This overview of paratactic sentences will lead us to grant special attention to two particular cases of clause chaining: one with focusing conjugations and the other with Null tense (also called Aorist, Narrative or Minimal) conjugation. Before going into the detailed study of clause chaining with conjugations, here is an overview of the language's verbal system.

1. The Wolof verbal system

Like several other languages of the Northern Atlantic branch of the Niger-Congo family (*cf.* Robert in press), one of the characteristic features of Wolof grammar is the synthetic expression of information structure through verbal morphology and focusing conjugations.

1.1. The conjugations

The Wolof verb constituent has two components (Robert 1991, 2000): an invariant (unless derived) lexical stem and an inflectional marker conveying the grammatical specifications of the verb (person, number, tense, aspect, and mood) as well as the information structure of the sentence (focus). The inflectional marker is preposed, postposed, or suffixed to the lexical stem, and organizes the verb system into ten paradigms or conjugations: Perfect, Presentative, Null tense (or Narrative), Verb Focus, Subject Focus, Complement Focus, Negative, Emphatic Negative, Obligative, Imperative and its negative counterpart: Prohibitive.[3]

In the affirmative indicative mood, there are three non-focusing conjugations (Perfect, Presentative, and Null tense) and three focusing conjugations (traditionally called "emphatic"): Verb focus, Subject Focus, and Complement Focus. The latter vary according to the syntactic function of the focused constituent: subject, verb, or complement (in the wide sense of any constituent which is neither subject nor main verb).

Thus, for *dem* 'go, leave' and *foofu* 'there, over there', one finds the inflections presented in Table 1.

	Perfect	**Presentative**	**Null tense**
1 SG	dem *naa*	*maa ngi*[4] dem	*ma* dem
2	dem *nga*	*yaa ngi* dem	*nga* dem
3	dem *na*	*mu ngi* dem	*mu ~ ∅* dem
1 PL	dem *nanu*	*nu ngi* dem	*nu* dem
2	dem *ngeen*	*yeena ngi* dem	*ngeen* dem
3	dem *nañu*	*ñu ngi* dem	*ñu ~ ∅* dem

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[3] For a presentation of the negative inflections, which will not be detailed here, see Robert 1990 or Robert 1991 : 283-302.

[4] The Presentative bears a spatial suffix, usually the proximal (*-i*), which can alternate with the distal (*-a*).

	Verb Focus	**Subject Focus**	**Complement Focus**[5]
1 SG	*dama* dem	*maa* dem	foofu *laa* dem
2	*danga* dem	*yaa* dem	foofu *nga* dem
3	*da(fa)* dem	*moo* dem	foofu *la* dem
1 PL	*danu* dem	*noo* dem	foofu *lanu* dem
2	*dangeen* dem	*yeena* dem	foofu *ngeen* dem
3	*dañu* dem	*ñoo* dem	foofu *lañu* dem

Table 1. *Indicative affirmative conjugations in Wolof*

In the absence of the imperfective suffix (-*y*), these conjugations or verb inflections have a present perfective value: action verbs refer to a past event, while stative verbs refer to a present state, except for the Presentative which refers to a current process[6] with all verb types (see examples in §1.2.3). More generally, these simple forms, which have present perfective affirmative meaning, can bear imperfective, anterior or negative suffixes.

Simple verb forms	*Suffixed verb forms*
zero suffix (perfective)	suffix -*y* ~ *di* (imperfective)
zero suffix (present)	suffix -*oon* (past anterior)
zero suffix (affirmative)	suffixe -*ul* (negative)

Table 2. *Aspecto-temporal meanings of verb forms in Wolof*

1.2. Conjugation meanings

A careful study of the contextual uses of Wolof conjugations in previous works,[7] has led me to propose the following analyses for the simple affirmative conjugations.[8]

1.2.1. The focusing conjugations
The three focusing conjugations are used according to the syntactic function of the focused constituent (subject, verb, or "complement", i.e., any other constituent). The focusing conjugations are obligatory in Wolof whenever a constituent (whatever its syntactic function) is the rheme (informative part, 'rheme" or commentary) in the information structure of the sentence. Therefore their uses go beyond the case of contrastive, exclusive or replacing focus; for instance, they are also used in *wh*- questions[9] and are obligatory in the replies to such questions (even when there is no conceivable alternative to the focused constituent) as in (1):

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[5] The complement-focusing paradigm consists of inflectional markers (e.g. 1sg *laa*) encoding both the focusing of the (preposed) complement, the subject person marker and the aspectual (perfective) meaning of the following predicate.
[6] On the specific effect of the imperfective suffix on the Presentative, see Robert (1991: 264) and (1994).
[7] For a full description of the Wolof verb system, see Robert (1991); for the Null tense or Aorist in particular, see Robert (1996) and for the focusing conjugations, see Robert (2000 and in press).
[8] Alongside the negative conjugations, there is also a complex affirmative conjugation with future meaning: this form is made up of an imperfective copula (*di*-) suffixed with the Perfect inflexion (e.g. *dinaa dem* "I will go"); furthermore, this conjugation can carry the imperfective suffix (e.g. *dinaa-y dem* "I occasionally go"); for details, cf Robert, 1991: 270-2.
[9] There is actually a double system of *wh*- questions in Wolof: the question markers consist of a class consonant which can bear a suffixed –*an* morpheme requiring a focusing conjugation (example 1) or the spatial suffix –*u* indicating the absence of localization in the deictic space and requiring the Null tense conjugation as in (2).

(1) - *Na* **nga** *tudd?*
    how COMPFOC.2SG be.named
    'What is your name?' (lit. HOW are you named?)

  - *Kumba* **laa** *tudd.*
    Kumba COMPFOC.1SG be.named
    'My name is Kumba' (lit. I am named KUMBA) [SP][10]

I reserve the term "rheme" (or "commentary") for the semantic/pragmatic notion of new information. I speak of "focus" only in reference to instances where the rheme (1) corresponds to a syntactic constituent and (2) is morphologically marked, as is the case with these focusing conjugations. For instance, in my terminology, the notion of "subject focus" applies to a morphological form which prototypically indicates that the syntactic subject is the rheme. In discourse, however, focusing forms may have a variety of uses in addition to this prototypical one indicating that the lexical content of the focused constituent is the informative part of the sentence, in particular for the verb which is a syntactic constituent having the special status of predicate.

My study of Wolof sentences in discourse has shown that the subject-focusing form has three main uses (see Table 3) as exemplified in (2)-(5) (from Robert 2000), subject identification being just the prototypical one**:**

  - Identification or qualitative designation of the subject (2)
  - Definition or explanation of the current situation (3, 4)
  - Exclamation with an intensification of the verb (5)

Table 3: *The main uses of the subject-focusing forms*

(2) - *Ku* ∅ *la bind bataaxal bii*?
      who NULL.3SG you write letter   this
   - 'Who wrote you this letter?'
   - *Daba moo ma ko bind*.
     Daba FOCSUBJ.3SG me   it   write
   - 'It is Daba (lit. DABA wrote it to me ~ it was Daba who wrote it to me)'.

A person arrives and hears screaming. He asks:
(3) - *Lu* ∅ *xeew fi?*
      what NULL.3SG happen here
   - 'What is going on here?'

   - *Musaa moo dóor Ndey.*
     Musa FOCSUBJ.3SG beat Ndey
   - 'It is Musa who has thrashed Ndey.' [SP]

People are talking about a man called Kebe and the crowd of people visiting him:
(4) *Kebe moo am alal, mootax nit ñi di ko topp.*
    Kebe FOCSUBJ.3SG have wealth that.is.why human the IPFV him follow
    'Kebe, (it is because) he has money that the people come to him.'
    (lit. KEBE has money, that is why people follow him). [SP]

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[10] On data references, see Appendix 1.

One should note that on the pragmatic level, this sentence (4) corresponds to sentence focus expressing an explanation, but on the morphological level, it corresponds to subject focus; this point will be explained in 3.

(5) *Mbuum bii, moo gudd!*
    rope this FOCSUBJ.3SG be.long
    'How long this rope is!'

In Wolof, the intensive meaning conveyed by subject focus is only possible for verbs expressing a measurable quality (essentially scalar stative verbs).[11] Actually, these three main uses of subject focus are not restricted to Wolof: they are equally possible in French, even the most surprising one (predicate intensity). The complement-focusing form, beside its uses in *wh*-questions and nominal predicates, serves mostly to identify the complement, with a more or less contrastive effect[12] (cf. example 1).

Concerning the verb-focusing form, beyond its uses for focusing on the lexical content (in parallel focus for instance), its main uses can be divided into four types which fall into two contrasting areas, simple predication and explanation:

  - focusing on the lexical content of the verb (6)
  - simple predication: qualitative definition of the subject or situation (stative verbs only) (7)
  - explanation (8a and b)
  - intensive predication ("really p") (9a)
    or focus on the truth value or assessment of the predicate (9b)

Table 4: *The main uses of the verb-focusing form*

 (6) *Waxuma la sax rekk lekk, dama ko wann*
    tell:NEG.3SG you even only eat VBFOC.1SG OPR eat.
     'I have not just eaten it, I have DEVOURED it'.
    (lit. I do not just tell you only eat, in fact I DEVOURED it)

Interestingly, its use as simple predication is found with stative verbs only: when focused, beside their focusing use on the lexical meaning of the verb (cf. 6), action verbs always have an explicative meaning (9), while stative verbs, or more precisely verbs expressing a quality or property, are commonly used with this focusing conjugation as mere statements serving for the predication of that property (7):

(7) *Dafa liw.*   (stative verb expressing a quality)
    VBFOC.3SG feel.cold
    'It is cold'.   (unmarked statement)

By contrast, the explicative meaning is possible for all verbs, action verbs (8a) as well as stative verbs (8b), and is actually the most common meaning for the former:

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[11] For details and explanation of this type of use, see Robert (1991:135, 306-307) or Robert (in press).
[12] For details, see Robert 1991: 149-164.

(8a) *Dafa   dem.*   (action verb)
     VBFOC.3SG[13]go
     'Actually, he left ~ it is because he left'.   (confirmation or explanation)

(8b) - *Lutax ngay   ñibbisi ?*
       why   NULL.2SG: IPFV go:back.home
       'Why are you coming back home?'

   - *damaa   xiif.*
     VBFOC.1SG:CONJ   be.hungry
      '(it is because) I am hungry.' [Church, 1981: 139]

Finally, the intensive predication produced by the Verb focus form is visible in contrast to the Perfect conjugation, as in the following example:

(9a) *Bëgg naa   dem*   *Dama   bëgga   dem*
     want PRF.1SG go   VBFOC.1SG want:CONJ   go
     'I want to leave'   'I **firmly intend** to leave'

(9b) *Momar   dafa   ko   gis.*
     Momar   VBFOC.3SG   OPR   see
      'Momar DID see it'.

In order to explain these various uses and meanings of focusing forms, I have defined focus (Robert 1993, 2000 and in press) as a specific mode of identification: in a focused sentence, assertion consists in the qualitative designation of an element whose existence is presupposed. In other words, the focused proposition consists of a "split assertion" involving a *temporal presupposition*[14] (of the predicative relationship, e.g. 'I am named somehow') and a *qualitative designation* (of the focused constituent: 'Kumba is how I am named'). The temporal presupposition of the predicative relationship involved in focused sentences explains why the unmarked focused conjugations (with a ∅ suffix for tense and aspect) have perfective present meaning in Wolof. Moreover, the fundamental meaning of qualitative designation of the focused constituent explains the neutral meaning of focused quality verbs with Verb focus conjugation, contrasting with the marked (focalized) meaning of action verbs: since verb focus is an assertion of the qualitative properties of the verb, its common use with verbs of quality follows from the affinity between the semantics of the verb (indicating a quality) and the semantics of the focusing conjugation itself (expressing a qualitative identification of the predicate). This is particularly important in a language where there is no simple present conjugation available to express a mere statement. The explanatory meaning appearing in discourse and clause chaining will be explained in 3. In fact, the grammaticalization of focus marking in verbal inflection is essential for the explanation of clause linkage by conjugation chaining in Wolof.

In contrast to the focusing conjugations, the three non-focusing conjugations indicate that the rheme (or informative part of the utterance) is not a syntactic constituent as such.

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[13] In the absence of the imperfective suffix (*-y*), all Wolof conjugations have present perfective meaning: action verbs refer to a past event while stative verbs refer to a present state; cf. above in 1.1.

[14] Actually, I prefer to call it a 'pre-constructed assertion' or 'pre-assertion' in as much as the speaker explicitly indicates (by using focus markers) that the predicative relation already holds true, independently from his present statement and commitment, and is warranted by a prior statement.

1.2.2. The Perfect

The Perfect has resultative meaning: it indicates that a process (already known to be ongoing) has henceforth reached its expected end-point or term so that there is nothing to add, no more variation: a stable resulting state has been reached; thus its informational content is conveyed by the aspecto-temporal component of the process.

With dynamic (or action) verbs that take place over time and have a temporal term, this conjugation indicates that any temporal variation or instability is now eliminated. It provides the classical attributes of perfect conjugations such as 'to have finished doing *p*' (10) or 'to have already done *p*' (11). Depending on the context, emphasis can also be laid on the resulting state (12).

(10) – *Yaa ngiy   lekk ?   - Déédéét, lekk naa   (ba   noppi).*
      PRST.1SG:IPV   eat   no   eat PRF.1SG (until stop)
      'Are you eating?'   'no, I have finished eating (my meal).'

(11) *Sarax bi àgg   na.*
      alms   the arrive PRF.3SG
      lit. 'The alms have (already) arrived' that is 'I have already given (meaning: I won't give any more).' [SP]

(12) *Jaar nga   ci néégu   góór*
      pass PRF.2SG in room:CONN   man.
      'You have gone through the men's house=you are circumcised', i.e. 'you are ambitious'. [XCL]

It is worth noting that with stative verbs, which have no temporal phases, no unfolding over time, one does not find the same aspecto-temporal meanings but, instead, modal or subjective uses. This corresponds to what De Smet and Verstraete (2006), after Halliday (1994) and Halliday and Hasan (1976) call "ideational subjectivity". Moreover, these subjective meanings are also associated with regular argumentative effects ('the discussion is over / I disagree / I agree / I am relieved / you should do something…') corresponding to what De Smet and Verstraete (2006) call "interpersonal subjectivity" that "deals with the positioning of the speaker with respect to [the representation of the extralinguistic and extra-discursive world] and his or her interaction with the interlocutor". Due to the properties of these Aktionsarten, the elimination of variation or instability corresponds here to the elimination of the epistemic variation surrounding the predicate (for more details see Robert 1991: 52-67 and Robert 1994). So with stative verbs, the Perfect indicates that there is no doubt over the assertion and conveys the speaker's viewpoint, with several possible contextual meanings,: expected conformity (13), agreement of the speaker (14), polemic or decisive assertion (15):

(13) [a person who was looking for a rope of some length]
      Buum bi gudd   na.
      rope   the be.long PRF.3SG
      '(It's all right) the rope is long (enough).' [gloss: here we are! at long last]

 (14) [two people looking at a boubou (cloth)]
      - *Bubu   bii, dafa   rafet.*
        boubou this, VBFOC.3SG be.beautiful

'This boubou is beautiful.'

- *Rafet   na   (de) !*
 be.beautiful PRF.3SG (PTCL)
 'It is indeed (beautiful).' ~ 'it is (definitely) a beautiful one.' (agreement of the speaker) [SP]

(15) [At the end of a discussion where the speakers disagree]
    Tàng   na!
     be.hot   PRF.3SG
    '(I'm telling you) it is hot!'
    [gloss: it is certain, there is no more discussion, there is nothing to be added, no comment, period].

1.2.3. The Presentative
The Presentative reports the current state of affairs by situating the predicative relationship in the speaker's space-time. More specifically, this conjugation indicates that the process is happening at the moment of the speech act, in a place close (*vs.* remote) to the speaker's space, as indicated by the spatial suffix: *-i* for proximal, *-a* for distal. The rheme here consists in the specification, the localization of the predicative relation in the discourse situation, whence its meaning of current present or a recent event which has been updated, for example by being just witnessed by the speaker. Contrary to the Perfect or the focusing conjugations, there is no presupposition here, no previous expectations: the process occurs at the time of speech and serves to define the discourse situation and the events which affect the speaker, and which happen to him suddenly and, strictly speaking, unexpectedly. This is why the Presentative is typically used by reporters and in the news. This point is important for explaining some modal effects of the Presentative (such as surprise or warning) as well as the interclausal meaning of the Presentative (cf. 5.): unexpected events tend to be perceived as detrimental.

(16) - *Gisuloo   Abdu?*
         see: NEG.2SG Abdu?
         'Have you not seen Abdou?'
(a)   - *Mu ngi   dellu dëkk bi.*
          PREST.3SG return town the
         - 'Here he is (right here) coming back to the village.' (he can be seen coming)
(b)   - *Mu ngi   jëm   ca dëkk ba, léegi laa   tase   ak   moom.*
          PREST.3SG be.headed.for at town the,   now COMPFOC.1SG encounter with him
         - 'He is on his way back to the village, I just ran into him.'
(c)   - *Abdu? Mu ngi   mujj   ci gannaaw!*
          Abdu? PREST.3SG be.the.last   at   back
         - 'Abdu? (As I am speaking to you) he is over there, way at the end of the line!'
(d)   - *Abdu? Mu nga   fa.*
          Abdu? PREST.3SG:DIST there
          'Abdou? He is over there.'

Stative verbs rarely seem to be used in independent clauses with the Presentative, but are common with this conjugation in paratactic structures (cf. 5.).

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1.2.4. The Null tense

The Null tense (also called Narrative, Aorist or Minimal) holds a special place in the system, defined by its being the only non-tensed conjugation. More precisely, with the Null tense, the verb has the properties of a predicative operator, but the speaker does not express any commitment and the event is not located in the speaker's time. Aspectually, the verb is minimally specified and referred to as a pure and simple notion without internal structuring: its aspectual meaning is therefore perfective and turns into imperfective only when suffixed with the imperfective suffix (-*y*). This analysis (Robert 1991 and 1996) can account for the various and, at first, apparently contradictory uses of the Null tense: on the one hand, this conjugation is common in proverbs (17) and obligatory in tales and historical narrations (18), in which the Null tense is apparently used in independent clauses; on the other hand, it is typically a subordinating mood since it is obligatory with most subordinating conjunctions (19); it is also the only conjugation used to mark clause subordination (complement clauses as in example (20), or consecutive or purpose clauses as in examples (21)) without any subordinating morpheme.

(17) *Ku* ∅ *muñ,* *muuñ.*
who NULL.3SG be.patient, smile
'The one who is patient will smile.' (Patience is rewarded) [SP]

(18) *As soxna dafa amoon doom ju jigéen. Bi doom ji matee sëy mu maye ko. Yàlla def xale ba ëmb...*
'Once upon the time there lived (*Verb focus*) an old woman with her daughter. When the daughter became (*Null tense*) nubile, her mother married (*Null tense*) her off. God willing (*Null tense*), the child became pregnant (*Null tense*)... '[T: 169]

As the beginning of a tale, example (18) starts with a formulaic expression using another conjugation (the Verb Focus conjugation) and then proceeds with Null tense clauses.

(19) *Bu* ∅ *ñówaan,* *xale* *yépp dañuy* *bég.*
When NULL.3SG come:PSTITER, children all VBFOC.3PL:IPFV be.pleased
'Whenever he came, all the children were pleased.'

(20) *Dama* *bëggoon* *ngeen* *àndal* *maak* *sama* *doom.*
VBFOC.1SG like:PST NULL.2PL accompany me:with my child
'I would like you (to) accompany my daughter for me.' [T: 169]

(21a) *Dafa* *sàcc, ñu* *kaaf* *ko.*
VBFOC.3SG steal NULL.3SG imprison him
'He stole (therefore) he was put in jail.'

(21b) *Jox ma ko, ma* *seet.*
give me it, NULL.1SG look
'Give it to me (so I can) have a look.' [SP]

With this conjugation, the process is anchored (located) in an unspecified situation. In other words, the verb is endowed with the properties of a predicative operator, but the event is not located in time, nor is the speaker committed to it, therefore lacking in temporal and modal specifications; the sentence is not a complete assertion and the clause depends on some extra-clausal element to specify in which situation this event is located and true. This element,

which I call "a situational locator", functions as an anchoring point and discursive landmark for the Null tense clause, and supplies it with the missing temporal and modal specifications. So the various uses of this conjugation can be explained through the various *syntactic statuses* of the situational locator as it is defined in discourse: a different sentence, another clause, another verb or zero. The various degrees of syntactic dependency of the Null tense clause, its more or less subordinating function and embedded status, as well as its semantic effects, depend on the degree of syntactic integration of the situational locator and the Null tense clause, as will be explained in §4.

2. Permitted and prohibited clause chaining : the role of conjugations; succession and cumulative assertion

The use of negative conjugations in clause chaining has not yet been studied; the following remarks only concern affirmative inflections.

2.1. Prohibited combinations

There are various types of constraints in paratactic clause chaining. The main constraint concerns the Null tense. It follows from the presentation in §1.2.4. that this conjugation is the favoured conjugation for a second clause (P2) in paratactic constructions, both within a complex sentence (as a subordinating mood), and after a previous sentence in narratives, as exemplified above in examples (17-21) (for a detailed analysis, see §4.1). However, when the Null tense appears in a *first* clause (P1),[15] it seems to block any clause chaining (P2) with any other conjugation (cf. Sall 2005: 270): for instance, while a sequence of Null tense-clauses is possible (example 22), as well as the chain Verb Focus followed by Null tense (23), the sequence Null tense-Verb Focus is impossible (24). An explanation for this constraint will be proposed in §4.

(22) *Mu   àgg, taw   bi Ø   door.*
    NULL.3SG arrive, rain   the NULL.3SG begin
    '(As soon as) he arrived, the rain started.'

(23) *Dafa   àgg   (rekk), taw bi Ø   door.*
    VBFOC.3SG arrive (only), rain the NULL.3SG begin
    '(As soon as) he arrived, it started to rain.'

(24) * *Mu   àgg,   taw bi dafa   door*
    NULL.3SG arrive, rain   the VBFOC.3SG begin

The combination of a first Null tense clause followed by a clause with any conjugation other than Null tense is the only impossible combination. However, some other types of sequences, although possible, seem to be rare or constrained. Firstly, the sequence Perfect-Null tense in juxtaposition is possible (25a), but the speaker naturally prefers to add a temporal auxiliary (25b) in the following example:

(25a) *? Ágg   na,   taw bi Ø   door.*

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[15] Within a narrative, but the Null tense cannot appear at the beginning of a narrative, cf. section 4.

   arrive Prf.3sg, rain the Null.3sg begin
   'He arrived, the rains started.'

(25b) *Ágg na, taw bi Ø   sooga   door.*
   arrive Prf.3sg, rain the Null.3sg Aux(happen.after):conj begin
   'He arrived (then) the rains started.'

It is worth noting that among their various respective uses, on the one hand, the Perfect is the verb form used for past events in the narration of personal experiences ("discours" in Benveniste's terms), while, on the other hand, the Null tense is required for past events in narratives such as tales or historical narration ("récit" in Benveniste's terms). This contrast and complementary distribution might explain the speakers' reluctance for using the two of them in the same sentence without a temporal auxiliary between the two clauses. The chaining would probably be more acceptable in a verbal context where the Null tense clause could be interpreted as a consequence of the Perfect clause: this would be a case of the Null tense being used as a subordinator.

In addition, the chaining of two Perfect clauses (cf. 2.2), while perfectly correct (example 26), seems to be rare:

(26) *Ágg na, taw bi door na.*
  arrive Prf.3sg, rain the begin Prf.3sg
  'He arrived, (then) it started to rain.'

Nor have we found many cases of clause chaining with two Verb foci: one example, given by Sall (2005: 269), lacks sufficient contextual indications for interpreting its meaning, otherwise than as a cumulative assertion (cf. (36) in §2.2.1.); in the second example (41), the translation clearly indicates that the first clause (P1) is an explanation of a previous statement or situation and the second one (P2) is an explanation of P1; it will therefore be presented in paragraph 3.

Lastly, a sequence of two Presentatives seems to require parallel structures where the first one contrasts with the second one, as in (27). It is probably because the insertion of the personal pronoun "you" reinforces the parallel and contrast that (29) is more acceptable than (28):

(27) *Mi ngi fóot, maa ngi togg.*
  Prest.3sg wash, Prest.1sg cook
  'He is washing the laundry, I am cooking.'

(28) *? Mu ngi bokk ak yow, yaa ngi ko koy tere!*
  Prest.3sg share with you, Prest.2sg OPr OPr:ipfv forbid
  'He has the same rights as you (and) you forbid him!'

(29) *Mu ngi bokk ak yow, **yow** yaa ngi ko koy tere!*
  Prest.3sg share with you you Prest.2sg OPr OPr:ipfv forbid
  'He has the same rights as you (and) you, you forbid him!'

2.2. *Juxtaposition of same conjugation: succession or cumulative assertion*

Despite the constraints mentioned above (§2.1.), the chaining of clauses with the same conjugation is possible for all conjugations. However, this type of chaining is apparently not

frequent except for the succession of Null tense clauses in narratives. Semantically, the chaining of two identical conjugations corresponds to two cases: (1) temporal succession of events (for Perfect and Null tense only) or (2) cumulative or contrasting assertion (all other cases).

2.2.1. Temporal succession of events
With dynamic processes (action verbs), clause chaining with the Perfect expresses a succession of events as exemplified in (26) above. One can contrast this temporal effect of the Perfect with that of the Presentative corresponding to two simultaneous actions in (27) above. The comparison with the use of Verb focus also shows that, in the case of the Perfect (30, repeated from 26), the link between the two events is purely temporal (one event occurs after a previous one): in contrast, the same sentence with Verb Focus in P1 and Null tense in P2 (31, repeated from 23) describes a situation in which the first event triggers the second one:

(30)   *Ágg   na,   taw bi door   na.*
       arrive   PRF.3SG, rain the begin   PRF.3SG
       'He arrived, (then) it started to rain.'

(31)   *Dafa   àgg   (rekk), taw bi Ø   door.*
       VBFOC.3SG arrive (only), rain the NULL.3SG begin
       '(As soon as) he arrived, the rains started ≈ 'His arrival was enough for...'

This succession effect for the Perfect is in accordance with its definition as indicating that a process has now reached its expected end-point/term: the chaining of two Perfect-processes corresponds to the successive recording, by the speaker, of resulting events. The Perfect is a tensed conjugation using the speech-time as reference point, so that clause chaining with two Perfects corresponds to the successive anchoring in speech-time of two resulting events. The (temporal) sequencing effect is the same with the Null tense (cf. example 18 above), but produced differently. First, the Null tense is used for expressing successive events in narratives rather than in discourse. Secondly, in this case, the temporal succession is not produced by successive anchoring in speech-time (as with the Perfect), but by what I call "situational anaphora" (Robert 1996) : lacking in temporal and modal specifications, the Null tense clause depends on some extra-clausal locator (cf. §1.2.4.). Thus, at the beginning of a narrative, there must be a previous clause with a tensed conjugation (for instance the Verb Focus with the past suffix, as in (18) which is the beginning of a tale), from which the Null tense clause can receive its temporal specifications: the Null tense clause then refers to this previous situation, just as a relative pronoun refers to its antecedent; that is what I call 'situational anaphora'. This situational anaphora goes on through the narration: all the Null tense-events follow one another starting from this previous temporal anchoring, as a set, inescapable chain of events, typical of historical narration (for details see paragraph 4). This particular relation between the Null tense-events is visible in the following example where the the first event instantly triggers the second one:

(32)   *Mu   ñëw, ma   dem.*
       NULL.3SG come, NULL.1SG go
       'Dès qu´il est venu, je suis parti.' [Sall, 2005: 267]
       '(As soon as) he came, I left.'

2.2.1. Cumulative assertion

In other cases, in particular with stative verbs which do not unfold over time, clause chaining with Perfects corresponds to a simple juxtaposition expressing cumulative assertion, which I define as a succession of two assertions with the same pragmatic effect or argumentative strength:

(33) *Grand,   rusloo nga   ma,   tooñ nga   ma   rekk.*
      Grand,   shame PRF.2SG   me,   wrong PRF.2SG me   only
      '*Grand*, you shamed me, you just plain wronged me.' [XSW]

(34) *Sant   naa   leen lool. Jërë   ngeen jëf.   Sama xol sedd   na.*
      thank PRF.1SG you much. be.worth PRF.2PL deed. My   heart be.cold PRF.3SG
      'Thank you very much. I say thank you. I am satisfied.' [G]

Generally, this pragmatic effect of cumulative assertion for clause chaining with the same conjugation holds true for conjugations other than the Perfect. Here is a good example of cumulative assertion with Subject Focus from a dialog in a TV series:

(35) *Moo   xam lu   tilim ci sama doom, moo   xam lu   wara*
      SUBJFOC.3SG know REL.PR be.dirty in my   child, SUBJFOC.3SG know REL   must:CONJ
      bon   ci sama doom, moo   xam feebaram,   moo   koy
      be.bad in my   child, SUBJFOC.3SG know   fever:POSS.3SG, SUBJFOC.3SG OPR:IPFV
      boot   ci diggu   ginnaawam   gi.
      cary.on.the.back in middle:CONN   back:POSS.3SG the
      'She is the one who knows what is unclean in my child, she is the one who knows what must be bad for my child, she is the one who knows if he is sick, she is the one who will carry him on her back.' [XSW]

The chaining of two Verb Focus conjugations, although apparently rare, also seems to be possible, as in the following example from Sall:

(36) *Géej gi dafa   aay, dañuy   tere   ku fa   sangu.*
      see the VBFOC.3SG rage VBFOC.3PL:IPFV prohibit REL there   bath
      'La mer est en furie, on interdit de s´y baigner.'
      'The sea is very rough, swimming is prohibited' [Sall 2005: 269]

One should remember that the two main uses of Verb focus are simple qualitative predication and explanation (cf. §1.2.1.). This example lacks sufficient contextual indications for interpreting its meaning in the paratactic structure more specifically than as a cumulative assertion. But another example (41 infra) indicates that the first clause (P1) explains a previous statement or situation, the second one (P2) explains P1, in accordance with the most common explanatory meaning of Verb focus in clause chaining which will be presented in 3.

In the case of Presentatives, as in example (29) above, paratactic chaining generally expresses a contrast between two parallel clauses and situations happening at the time of speech:

(37) *Maa ngiy   génn, yow, yaa ngiy   dugg.*
      PREST.1SG:IPFV exit   you   PREST.2SG:IPFV enter
      'I am going out (whereas) you, you are coming in.'

One could probably generalize the following point concerning non-temporal clause chaining: depending on whether the argumentative orientation of the two clauses is convergent or divergent, the effect of the repetition of the same conjugation can either be that of strengthening, reinforcing the preceding assertion in a cumulative fashion (cf. 33-35), or that of emphasizing contrast or discordance between the two situations (cf. the Presentative in 29 and 37).

The remarkable argumentative effect produced here by the Presentative is in accordance with its most common meaning of discordance in clause chaining and due to its specific semantics, as will be explained in section 5. We can now summarize the semantics of clause chaining with the same conjugation in Table 5.

Chaining of a single conjugation:	*Semantics:*
… Null tense P1, Null tense P2:	- temporal succession in narratives
Perfect P1, Perfect P2 (action verbs):	- temporal succession in discourse
Perfect P1, Perfect P2 (stative verbs) or	
Any other Conjugation P1, same Conjugation P2:	- cumulative assertion:
	(a) reinforcing effect (all conjugations)
	(b) contrastive effect (Presentative)

Table 5: *Semantics of clause chaining with the same conjugation*

Alongside this type of clause chaining, the Wolof system provides two particular cases of special interest: clause chaining with focusing conjugations (section 3) and clause chaining with Null tense (section 4). Apart from the use of negative conjugations which are not studied here, these two types of paratactic chaining seem to be favoured since they are the most frequent. We will also mention interesting cases of clause combining with the Presentative (section 5).

3. Focus in clause chaining: explanation and pragmatic dependency (discursive landmark)

Since it entails some presupposition (cf. 1.2.1.), a focused clause is *a priori* seldom used alone, without clause chaining: the focused clause is usually related to a previous clause or sentence (corresponding to the presupposition) to which it adds supplementary information, contrast or correction bearing specifically on the focused constituent. In dialogs in particular, a focused sentence is frequently used as an answer to a previous question or statement: for instance a sentence like *JOHN went there* is frequently used after the previous question *Who went there?* or for correcting a preceding statement *You went there* which both correspond to the presupposition ('somebody went there') involved in the focused clause *JOHN went there*. This is generally true in Wolof. However, in this language, the focused clause may appear in discourse where no preceding clause corresponds to the presupposition. In particular, as we saw in §1.2.1., the Verb focus form yields two paradoxical and apparently contradictory uses: (1) it is the usual and ordinary conjugation for stative verbs, more specifically for verbs expressing a quality or property such as *sedd* 'to be cold', *xonq* 'to be red' or *xiif* 'to be hungry' (which are verbs in this language which has no adjectives); (2) action verbs can not be used with a Verb focus form outside of clause chaining, where the focused clause has explanatory meaning. In the first case (with stative verbs), the morphologically focused clause can appear on its own, and pragmatically corresponds to a mere statement as in the following example:

(38) *Dafa   tàng.*
    VBFOC.3SG be.hot
    'It is hot / the weather is hot.' [SP]

We explained this paradoxical use in §1.2.1 through the affinity between the semantics of the verb (expressing a quality) and the semantics of the focusing operation indicating a qualitative designation of the focused constituent (here the verb). By contrast, while it is possible to open discourse with an action verb in the Presentative form (39a) or with a stative verb in the Verb focus form (39c), the Verb focus is inappropriate with an action verb (39b):

(39a) *Maa ngi sant   ñi   doxal kolok   bii ci li ñu   ma   may*
    PREST.1SG thank REL lead   conference the at REL NULL.3PL me   offer
    ngir ma   ubbi ko.
    for   NULL.1SG open it
    'I thank the organizers for inviting me to open this conference.'

    Maa ngi   sant...   (Presentative appropriate)
    PREST.1SG   thank
    'I thank…'

(39b)? *Damay   sant…*   (Verb focus inappropriate for opening)
    VBFOC.1SG:IPFV   thank

(39c) *Dama   bëgga   sant...*
    VBFOC.1SG   want:CONN   thank
    'I want to thank…'   (Verb focus appropriate)

(39b) would appear as the explanation of a previous sentence and would therefore be inappropriate as an opening. So a clause with an action verb like 'to leave' would be incomplete if it appeared alone and could only be used in clause chaining with an explanatory meaning as in (40):

(40) *Dafa   dem*
    VBFOC.3SG leave
    - * He has left.
    - '…it's that he has left (that is why...)'

In fact, the common meaning of Verb focus (whatever the Aktionsart) in clause chaining is that of explanations as in example (8b) in a dialogue, or here in a complex sentence (41):

(41) *Dangaa   narulwoona   jénd, dangeen   defe ni jigéen ñépp a   yem.*
    VBFOC.2SG intend:NEG:PST:CONJ   buy   VBFOC.2PL think as women all   FOC be.similar
    '(It's that) you had no intention of buying (because) you think that all women are the same.' [XCL]

Here we have two Verb focus clauses: as shown by the translation, the first one (P1) is the explanation of a previous statement or situation, the second one (P2) is the explanation of

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P1[16]. More precisely, in clause chaining, the Verb focus clause appears as the *causal source* of P2 when it is the protasis (P1), and instead as the *explanation* of P1 when it is the apodosis (P2). This causal source meaning of P2 is illustrated by the comments made on the two contrasting examples, (42, repeated from 26) with the Perfect and (43, repeated from 23) with the Verb focus in the protasis:

(42) *Ágg   na,   taw bi door   na.*
     arrive PRF.3SG, rain the begin PRF.3SG
     'He arrived, (then) it started to rain.'

(43) *Dafa   àgg   (rekk), taw bi Ø   door.*
     VBFOC.3SG arrive (only), rain the NULL.3SG begin
     '(As soon as) he arrived, it started to rain.' ≈ 'His arrival was enough for...'

With the Perfect (42), the link between the two events is that of purely temporal succession, while (43), with the Verb focus in the protasis, indicates that the first event triggers the second, i.e. is its causal source, as appears in one informant's comment: "it could be used, for instance, to denote the supernatural power of a marabout whose arrival would trigger the rains, would cause the rain to fall." Example (44) gives another illustration of this causal source meaning for the Verb focus in the protasis, while (45) and (46) illustrate its explanatory meaning in the apodosis:

(44) *Dafa   ko   fetal, mu   dee.*
     VBFOC.3SG him shoot, NULL.3SG die
     'He shot him (therefore) he is dead.'

Here, the Null tense expresses a consequence. Verb focus and Null tense are therefore complementary in this type of causal structure, the first one indicates the starting point or causal source of a situation and the second one its resulting consequences.

(45) *Sama càmmiñ waxal   mboog,   man dama   yàkkamti.*
     My   brother[17] speak:IMP therefore me VBFOC.1SG be.rushed
     'Come my friend, make up your mind (because) I am in a rush.' [XCL]

(46) *Moytul   paaka bi, dafa   ñaw   de!*
     avoid:IMP knife the VBFOC.3SG be.sharp PTCL
     'Be careful with the knife (because) it is sharp!' [SP]

I have also found a few cases where the Verb focus conjugation in the apodosis seems to be used simply in order to characterize P1 more explicitly or to add a qualitative description of the action expressed by P1 rather than a true explanation:

(47) *Biig,   nelawuma   benn yoon, dama   fanaane   xoole   ba*
     last.night sleep:NEG.1SG one way   VBFOC.1SG spend.night keep.awake till
     bir-set.

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[16] I have found the same meaning of cumulation of explanations when the two Verb focus clauses are coordinated with *te* ('and'), but in this case, the causal link between the two clauses can be either positive or contrastive as in the following example: [to justify the fact that he no longer prays] *Yàlla dafa yéex **te** man dama yàkkamti* '(it's that) God is slow, (whereas) me, I'm in a hurry'.

[17] brother for a sister.

dawn

'Last night, I didn't sleep once, I stayed awake until morning.' [XSW]

(48) *Yow   deewagoo,   dangay   door.*
you   die:not.yet:NEG.2SG   VBFOC.2SG: IPFV   begin
'You, you are not dead yet, you are just beginning.' [XSW]

This use is in accordance with the qualitative meaning of Verb focus (cf. §2.1.).

In both cases, as a causal source or an explanation in discourse, Verb focus in clause chaining generally indicates the necessary and sufficient cause of a situation. How then could we explain this specific meaning in clause chaining, and account for these various pragmatic meanings of focused clauses?

In fact, the range of meanings of focusing conjugations depends on interclausal linkage and particularly on the available "discourse reference points", which may or may not coincide with the presupposition of the focused sentence. In §1.2.1., we defined focus as a specific mode of identification: in a focused sentence, the assertion consists in the *qualitative designation* of an element whose existence is presupposed. The various pragmatic functions of the focused clause can be accounted for by a regular mechanism combining this unitary definition of focus with various discursive linkages. The proposed definition implies (1) that the fundamental meaning of the focused clause is that of a qualitative assertion (meaning, in the case of verb focus, that the predicate is asserted for its lexical properties), (2) that the focused clause, by itself, always involves a presupposition. As we said earlier, the focused proposition (*JOHN went there*) consists of a "split assertion" involving two components having different pragmatic statuses: a temporal presupposition of the predicative relationship ('someone went there') and a qualitative designation of the focused constituent ('John is the one who went there'). This means that the whole predicative relationship (R) is present in the focused clause as a presupposed *background* upon which the focused element is profiled as the salient component, constituting what is really asserted by the speaker. This predicative background functions as an internal clause landmark.

In the prototypical case, the preceding clause corresponds to the presupposition, and therefore to the internal landmark of the focused sentence. But this is not always the case. The available discourse reference points (R') created by discourse chaining may or may not coincide with this internal focused clause landmark (R): it may be absent (∅), identical or different.[18] These different cases correspond to the various uses of the focused forms as summarized in Table 3 for Subject focus and Table 4 for Verb focus. One may describe the various discursive chainings of focused clauses as follows:

1. If the focused clause is not connected with any preceding clause (discursive landmark = ∅), in conformity with its meaning of qualitative designation, it takes on a defining qualitative predication meaning (qualifying the subject or defining the situation in the case of sentence scope focus) as exemplified in (7) and (38);
2. If the focalized process is compared to another meaning of the same process (R/R), e.g. in the case of a preceding question, parallel focus (6) or doubt (9a and 9b), it takes on intensive "really" meaning (where one predicates the truth value of a previously

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[18] For a more detailed account of the various meanings of focused forms, in particular on the intensive value of the Subject focus, cf. Robert 1990, 1993 and 2000.

predicated element);
3. If it is connected to another clause (R'), it takes on causal meaning (8a and 8b).

The predicative relation (or the process) compared to which the focalized predicative relation is posited, and which constitutes the discourse landmark, may thus be absent ($\varnothing$ = absolute initial position), identical (R) or different (R') from the predicative relation presupposed by the focalized sentence (R). These various types of discursive chaining produce the different meanings of Verb focus clauses as summarized in Table 6.

R/$\varnothing$	R/R	R/R'
definition	"really "	causal source, explanation

Table 6: *Typology of Verb focus meanings in clause chaining*

The fact that the fundamental meaning of the focused constituent is a designation of quality explains the neutral meaning of focused verbs of quality with Verb focus conjugations when there is no clause chaining ($\varnothing$). But how is it that the connection between the two clauses produces causal meaning? The relations between clauses can be reduced to two basic categories: circumstance and causation (as well as absence of relation). With predicate focalization, there is some identification of the predicative relation's core; the relations between the two clauses is thus not of a circumstantial but rather of a causal nature. This creates a connection between two predicative relations where one serves as the landmark for the other. One may therefore gloss the example of the explanatory focalization above (example 46) as follows: 'be careful with the knife, as it is sharp'. In this example, one glimpses the links between the explanatory meaning and the qualitative predication typical of stative verbs: in connection with another sentence, indeed, mentioning the quality of knife is enough to use it to justify the situation previously posited: it is because it is "really" sharp that one must be careful of the knife.

In the case of subject focus,[19] the explanatory meaning rests on the same mechanism, but the speaker also chooses to omit the link of the presupposed predicative relation, which is equivalent to explaining a situation by designating the author responsible for another situation: thus in example 3, in response to the question 'what's going on here?', the speaker answers 'it's Musa who hit Ndey'. One should note that we have not yet encountered examples where the Complement focus has causal meaning.

This causal meaning of focused forms (verb or subject) in clausal linkage relies on the general mechanism of connections between the discursive landmark (preceding clause) and the internal landmark (presupposed assertion), and is attested too in many languages such as French, Berber (Leguil 1987), Umpithamu (Verstraete, this volume) or some Oceanic languages (Bril, this volume). It provides us with an interesting case in which interclausal dependency is marked by forms indicating information hierarchy. This corresponds to a particular type of dependency, different from embedding, subordination or syntactic dependency, i.e. pragmatic dependency of a focused clause on its discursive landmark. This particular type of dependency construes the semantics of interclausal linkage.

4. Null tense, consequence and situational dependency

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[19] For a thorough analysis of the various uses of Subject Focus, see Robert 1993.

The Null tense also yields another particular type of interclausal dependency which has not yet been sufficiently described and deserves special mention.

In order to understand how this works, one has to remember the constraints in the apparently "independent uses" of the Null tense: in tales or narratives, a Null tense clause never appears first but only after the temporal specification provided by another conjugation (cf. example 18). In discourse, it is found only in specific utterances such as proverbs (cf. 17) or stage directions, which can be described as general or *a priori* statements whose truth value does not depend on the speaker and on the time of speech (gnomic value), but which are used by the speaker in order to illustrate a particular situation. In other cases, the Null tense clause always comes second, embedded in a previous clause with a different conjugation (examples 20 and 21) or with a subordinating conjunction (19). Otherwise, the Null clause appears as incomplete and requiring further specification, as in injunctions or in *wh*-questions where it is obligatory with the question markers of the *−u* series (*ku* 'who', *lu* 'what', *fu* 'where', *nu* 'who'). In other words, the Null tense clause presents a large array of dependency types.[20]

According to my analysis (cf. §1.2.4.), with the Null tense, the process is located with respect to an unspecified situation: the locator-slot, defined by the speaker's time and his commitment to the utterance, is vacant; this can be symbolized as: [ ]$_{Sit}$. However, as with any utterance, the Null tense clause is expected to receive some temporal specifications and the speaker's endorsement in order to constitute a speech act, therefore, the utterance has to be located via an *extra-clausal locator*. That is why the Null tense clause can not appear in first position in a clause chain (cf. §2.1). If there is another utterance functioning as a locator and anchoring point in the preceding context, the clausal chain provides the special characteristics of what I have called *situational anaphora* (cf. §2.2.1) corresponding to both temporal anaphora and an assertive dependency at work in tales (cf. 18) which always begin with another temporal location and for which the speaker is not committed as a warrant of its truth: the process is located in a time and situation that is specified in another clause. If the locator is not another sentence and independent clause, but a previous clause in the same sentence, the Null tense clause is embedded in a complex sentence with consecutive or purposive meaning. If the locator is another verb in a previous clause, the Null tense clause is embedded in a complex sentence as a complement clause. Finally, if there is no locator in the preceding context, the utterance is incomplete and pragmatically not independent: it is characterized by *assertive dependency* (lack of speaker's commitment which requires further specification of its truth value by the hearer) as is the case with interrogation, injunction and hypothesis.

So, Null tense is fundamentally a dependent mode and, as shown in Table 7, the nature of the situational locator and its integration in the Null tense clause is the variable determining the various degrees of dependency displayed by the Null tense clauses, which range from assertive to syntactic dependency, and extend from discourse coherence to embedding.

Syntactic integration:	Nature of the locator:	Nature of dependency:
Ø	zero	assertive dependency
	different sentence	situational anaphora
	different clause	embedding (purposive or consecutive)
	different verb	embedding (complement clause)

[20] For more details, see Robert 1991 (199-234) or Robert 1996.

Max.

Table 7. *Null tense-clauses and the syntactic integration of their locator*

Now, how can we more precisely account for the meaning of the Null tense in clause combining, namely the consecutive meaning? Being located in an unspecified situation for both temporal and modal specifications, the Null tense clause is expected to be located via an extra-clausal locator, otherwise it is incomplete. Therefore, there is a necessary and sufficient link between the clause containing the Null tense and its locator to constitute a complete and valid sentence: the specification of the locator *triggers* the validation of the Null clause. Depending on the temporal and epistemic status of the main clause's event, this particular relation between the Null tense clause and its locator will correspond to a purposive or a consecutive clause: when the locator, i.e. the event in the main clause, is accomplished, the clause linking value of the Null tense is that of a consecutive clause as in (21a), whereas when the first event is irrealis, the Null tense clause takes on the meaning of a purposive clause, as in (21b). However, in both cases, the relation between the first clause and the Null tense clause expresses consecution: the Null tense indicates that as soon as the first clause is asserted, it then triggers the validation of the second clause This specific semantic relation could account both for the purposive or the consecutive meaning of Null tense embedded clauses and for the specific semantics of historical narratives and tales. By contrast with the Perfect (cf.§1.2.2. and §1.2.4.) which is used for narrating personal experiences (to which the speaker is committed), the Null tense expresses successive events in narratives, rather than in discourse. In this case, the temporal succession of events is produced by "situational anaphora" and not by successive anchorings in speech-time: the specification of a first temporal location (by another conjugation) triggers the validation of the Null tense clause which appears as a development of the situation specified in the opening clause. After which all the Null tense events follow one after the other, out of this previous temporal anchoring, as an inescapable chain of events, independent from the speaker. This particular presentation of event chaining is typical of historical narrations where the chain of events is presented *a posteriori* as necessary and inescapable, and which we will call a reconstructed consecution of history.

Before closing this overview of paratactic clause chaining in Wolof, I would like to mention one last interesting case which also concerns the Null tense: the role of the imperfective marker in clause chaining.

5. The role of the imperfective in clause chaining: simultaneity and opposition

As mentioned in §1.2.4., the Null tense (with Ø) has perfective meaning. It becomes imperfective with the *-y (~ di)* suffix. Apparently, when suffixed with this *imperfective* marker, a Null tense clause in the apodosis tends to indicate temporal concomitance with a connotation of contrast or opposition with regard to the protasis, rather than consecution, as in the following examples:

(49) *Maa ngi   toog   ci sama biir   néeg di   dégg   yépp,*
       PREST.1SG be.sitting at my   inside   room IPFV hear   all
       ngay   wax.
       NULL.2SG:IPFV   talk

'I am sitting in my room hearing everything (while) you are speaking.' [XSW]

(50) [A first spouse is talking to her husband about the bad behaviour of his second spouse]
Ñeme   na   ñëw   fekk ma lay[21]   *defaral   njar,*
dare   PRF.3SG come   find me you:IPFV prepare:BEN curdled.milk.with.water
muy   indi   istuwaar?
NULL.3SG:IPFV bring   quarrel
'She would dare come make trouble (while) I am making you curdled milk?'
(Lit. She dares come find me preparing milk for you (and) she makes trouble?)

The effect of simultaneity is clearly produced by the specific influence of the imperfective on the dependency expressed by the Null tense. This does not hold true for the other conjugations in clause chaining. Interestingly, I have found more or less the same interclausal meaning ('P1 though/and yet P2') when a *Presentative* in P1 is followed by the perfective (51) or imperfective (52, 53) Null tense in P2:

(51) [a child is shocked by the bad behaviour of his brother who just beat him]
Mu ngi   fekk may   nelaw, mu   dóor ma!
PREST.3SG find me: IPFV   sleep NULL.3SG beat me
'He finds me asleep and he hits me!'

(52) *Paaka bi mu ngi   ñaw   be, nga   koy   foye!*
knife   the PREST.3SG be.sharp so NULL.2SG OPR:IPFV   play:INS
'The knife is so sharp and (yet) you are playing with it!'

(53) *Mu ngi   ko ëpp   ba pare,   nga   koy   yokk!*
PREST.3SG OPR be.in.excess   until be.ready, NULL.2SG OPR:IPFV make.bigger
'It's already too big for him and (yet) you (still) make it bigger!'

Stative verbs appear to be rarely used with the Presentative alone. However, they are frequently found in the following type of structure: in the protasis of a binary structure, where one has an action verb expressing an unexpected *contradiction* in the apodosis; in this case the sentence takes on the meaning of "he is... and yet..." as in (52) and (53).

This interclausal meaning is due to some specific semantic features of the Presentative which also expresses some simultaneity between the event expressed by the process and the speech act[22], this time: as shown in §1.2.3., the Presentative indicates that the present process is unforeseen (absence of presupposition or previous expectation). It is unexpected for the speaker, and unexpected events tend to be expressed as detrimental. This point could explain some of the modal effects of the Presentative (such as surprise or warning) as well as its interclausal meaning of discordance or opposition (always marking surprise) when combined with a Null tense process expressing an action unexpectedly triggered by the Presentative.

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[21] When there is a clitic object pronoun in the clause, it attracts the imperfective marker; this rule applies to all conjugations and not only to the Null Tense.
[22] Of course in (51), when he complains about being beaten, the speaker is not asleep anymore, but the event is expressed as having just happened, and informant insist that, the Presentative reports it as a current state of affair. Its meaning is that of a current present or a recent event with present relevance, and just witnessed by the speaker for istance (cf. §1.2.3.).

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The Presentative is also used in connection with the meaning "hardly has... that...": the meaning is very close to the preceding one. Here too, surprise at an unexpected turn of events is expressed, the only difference being that there is more insistence on their synchronicity. The Presentative clause is often (but not necessarily[23]) reinforced by *rekk* "just":

(54) *Mu ngi   takk jabaram   ba paré,   Ø   bàyyi ko fi!*
     PREST.3SG bind wife:POSS.3SG   till be.ready NULL.3SG leave OPR here
     'Hardly has he married his wife that he's abandoning her!'

(55) *Mu ngi   tëj   buntam   rekk, xale   yi Ø   tijjiwaat!*
     PREST.3SG shut door: POSS.3SG only, children the NULL.3PL shut:INV:ITER
     'Hardly has he closed the door that the children are opening it again!'

These uses in connection with the Presentative thus indicate that two processes perceived as *discordant* by the speaker coincide temporally or immediately follow each other; this process allows the speaker to convey this fact as well as disapproval at the turn of events.

As noted in §2.2.1. on the subject of clause chaining with the same conjugation, depending on whether the argumentative orientation of the two clauses is convergent or divergent, the effect of the repetition of the same conjugation can be that of strengthening, reinforcing the preceding assertion in a cumulative fashion, or emphasizing a contrast or discordance between the two situations: the speaker's surprise, related to the unexpected character of the event expressed by the Presentative, seems to result in discordance when the conjugation connects two events.

Conclusion

This overview of clause combining with various conjugations in Wolof reveals a large array of semantic interclausal meanings and constraints that can be summarized as in the following table:

Prohibited chains:
P1 Null tense, P2 any conjugation except Null tense

Chaining of the same conjugation:
… P1 Null tense, P2 Null tense: - temporal succession in narratives
P1 Perfect, P2 Perfect (action verbs):   - temporal succession in discourse
P1 any conjugation expect Perfect, P2 same conjugation as P1:
(or Perfect with stative verbs)   - cumulative assertion:
                                     (a) reinforcing effect (all conjugations)
                                     (b) contrastive effect (Presentative)

Focusing conjugations in combination: - causal source, explanation

Null tense in second position:
P1, P2 Null tense: - situational anaphora: consecution

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[23] Note also that the use of *rekk* to reinforce the assertion is not restricted to Presentative clauses ; it is also found with some Verb focus clauses (as in example 23), Negative clauses (6) or Perfect clauses (as in 31) for instance. A systematic study of discourse particles in Wolof is still to be done.

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    Markers of simultaneity in combination:
    P1 Presentative, P2 Null tense (perf. or imperf.)   - concomitance ± surprising discordance
    P1 any conjugation, P2 imperfective Null tense

Table 9. *The semantics of parataxis in Wolof*

Thus the current analysis reveals (1) that forms indicating information hierarchy can be used to mark specific interclausal dependency, (2) that the general constraint on the necessary temporal location and the speaker's commitment to his utterance has significant effects on clause chaining. Interestingly for the typology of clause linkage, due to the nature of the different conjugations, paratactic clause chaining in Wolof yields different types of interclausal dependency, defining an integration gradient: from simple assertive juxtaposition to more integrated syntactic dependency (with the embedded Null tense clauses at the endpoint of the gradient), through lesser known types of dependency which we have defined as pragmatic dependency (for focused sentences depending on a discursive landmark) or situational dependency (for Null tense sentences depending on an extra-clausal locator). The various combinations of conjugations in clause chaining produce different regular interclausal semantic effects: succession, cumulative assertion with reinforcing or contrastive effect, causality, opposition or consecution. Remarkably, these semantic values produced by parataxis in Wolof echo the different discourse relations described by the Segmented Discourse Representation Theory (SDRT), such as narration, explanation, elaboration, result, parallel or contrast (Lascarides & Asher 2003).

Appendix 1: Corpus and data references

When not otherwise indicated, the data come from native-speaker elicitation, following the method described in Robert (2004), the elicited utterances were always contextualized, that is produced with the description of a precise situation in which they would be used, and glossed by the informant. Otherwise the following abbreviations are used for the various references:

G :   *Gancax gi*, a TV play from the radio program *Jamonoy Tey,* broadcast by the ORTS (Office de Radiodiffusion-Télévision du Sénégal) on July 8, 1984.
SP :   spontaneous utterances taken down by the author in Dakar in 1985 and1986.
T :   The anthology of traditional Wolof tales and mythological narratives edited by Kesteloot & Mbodj.
XCL: A play entitled *Xët cig lëndëm*, whose manuscript was furnished in 1985 by the company of the Daniel Sorano Theater in Dakar.
XSW : *Xam sa waru gaar,* a play from a TV educational program, by the ORTS (Office de Radiodiffusion-Télévision du Sénégal) in 1986.

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Grammatical abbreviations

1, 2, 3	first, second, third person
ANTER	anterior suffix –*ee*
AUX	auxiliary
BEN	benefactive verb suffix
COMPFOC	Complement-focusing conjugation
COMP	complementizer (introducing complement clauses)
CONN	connective suffix (-*u* SG, -*i* PL)
CONJ	conjunctive verb suffix -*a*
DEM	demonstrative
DIST	distal spatial suffix (-*a*)
FOC	subject-focus particle or suffix (-*a*)
IMP	imperative
IPFV	imperfective suffix (-*y*); full variant: *di~d-*: imperfective copula
INS	instrumental verb suffix

INV	inversive verb suffix
ITER	iterative verb suffix (*-(w)aat*)
NEG	negative suffix (*-ul*)
NEG.(3SG)	Negative perfective conjugation (3SG)
NULL	Null tense conjugation
OPR	object pronoun
P	proposition or clause
PST	past suffix (*-(w)oon*)
PASTITER	past iterative suffix (*-(w)aan*)
PERF	perfective
PRF	Perfect conjugation
POSS.3SG	3sg possessive suffix (*-am*)
PTCL	discourse particle
PL	plural
PREST	Presentative conjugation (discontinuous morpheme)
PRON	pronoun
PROX	proximal spatial suffix (*-i*)
REL.(PR)	relative pronoun (class marker C+i for the definite, +u for the indefinite)
SG	singular
SUBJFOC	Subject-focusing conjugation
SUFF	verb suffix
VBFOC	Verb-focusing conjugation