Transitivity in Atlantic and Mande languages

Denis Creissels   **Alain Christian Bassène**   **Djibril Dramé**
University of Lyon   University of Dakar   University of Bamako
denis.creissels @univ-lyon2.fr   acbassene@gmail.com   dramedjibril87@yahoo.fr

1. Introduction

Atlantic and Mande are two language families occupying contiguous areas in West Africa. Genetically, as regards Atlantic languages, there is consensus that they belong to the Niger-Congo phylum, but the opinion that prevails now is that Atlantic as it was delimited by Greenberg (1963) and Sapir (1971) is not a genetically valid grouping, and rather constitutes an areal grouping of two or more independent branches of Niger-Congo. In this presentation, 'Atlantic' refers to a subset of Greenberg/Sapir's Atlantic delimited as proposed by Pozdniakov (2015). As regards Mande, there is no problem about the unity and delimitation of this language family, but its status as a Niger-Congo outlier or an independent language family is controversial.

Whatever their precise status in the genealogical classification of languages, typologically, Atlantic languages on the one hand and Mande languages on the other hand are remarkably homogeneous, but the two families contrast in many respects:

– Atlantic languages have gender systems of the type commonly found across the Niger-Congo phylum ('noun class systems'), whereas Mande languages don't have gender,
– the linear order of constituents in verbal predication is SVOX in Atlantic languages, SOVX in Mande languages,
– the linear order in the genitival construction is 'head followed by modifier' in Atlantic languages, 'modifier followed by head' in Mande languages,
– multiple object constructions are common in Atlantic languages, inexistent in Mande languages,
– Atlantic languages have rich systems of verb inflection, whereas Mande languages have very reduced systems of verbal inflectional affixes, and use rather 'predicative markers' postposed to the subject to express grammaticalized TAM distinctions and polarity,
– Mande languages have relatively rich inventories of adpositions (mainly postpositions), whereas Atlantic languages have relatively few adpositions (mainly if not exclusively prepositions),
– in the domain of constructional morphology, compounding is much more productive in Mande than in Atlantic,
– Atlantic languages have rich systems of 'verbal extensions' (derivational V>V affixes),[1] whereas Mande languages have relatively reduced systems of derivational V>V affixes (the causative extension being the only one commonly found among Mande languages).

In this presentation, we explore the question of possible contrasts between Atlantic and Mande languages in the domain of transitivity. At this preliminary stage of our investigation, we systematically compare two Atlantic languages (Wolof and Jóola Fooñi) and two Mande languages (Mandinka and Soninke). After discussing some methodological issues (Section 2) and providing the necessary background information about verbal predication and valency-changing derivation in the languages dealt with (Sections 3 & 4), we compare their behavior with respect to the two

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[1] On this aspect of Atlantic language structure, see in particular Nouguier-Voisin (2002) on Wolof and Renaudier (2012) on Sereer.

typological parameters of transitivity prominence (Section 5) and valency orientation (Sections 6 and 7). Section 8 puts forward some concluding remarks.

2. Methodological issues

Large scale comparison of languages in the domain of transitivity implies the use of pre-established questionnaires consisting of lists of verb glosses for which equivalents are sought in each of the languages considered – see in particular Haspelmath (1993, 2015), Nichols & al. (2005), Say (2014). The obvious problem with such studies is that the possibility of finding satisfactory equivalents depends on the lexification patterns of individual languages. Consequently, such questionnaires are inevitably biased by the typologist's familiarity with the lexification patterns of a limited number of languages, and the proportion of approximations and/or gaps one must allow when filling them for other languages may be a problem for the interpretation of the data obtained by such a method. A possible way of testing the validity of such large scale typological comparisons in the domain of transitivity is to check them against the results of more 'local' comparisons based on data that take into account the lexification patterns typical for a given family or area.

Our contrastive analysis of transitivity in two Atlantic and two Mande languages is not based on a pre-established questionnaire. On the basis of our knowledge of the lexicon of the languages in question, we selected a list of 248 verb glosses referring to two-participant events for which each of the four languages has a verb available to express the meaning in question by simply combining with two NPs encoding the two essential participants.

3. Verbal predication in Atlantic and Mande languages

3.1. Alignment properties of Atlantic and Mande languages

Atlantic languages are unproblematic 'accusative' languages in which the unique argument U of semantically monovalent verbs shows coding properties identical to those of the A term in transitive predication, and most syntactic operations treat the term showing the same coding properties as A in a uniform way. As regards Mande languages, South-West Mande languages have been claimed to show some ergative features, but this phenomenon is at most marginal. Consequently, the traditional notion of *subject* encompassing U and A can be extended to the description of Atlantic and Mande languages without any major problem.

3.2. Transitivity marking in Atlantic and Mande languages

Like most (all?) Atlantic languages, Wolof and Jóola Fooñi have no specific transitivity marking, and the presence vs. absence of a term in object role is the only visible difference between transitive and intransitive predication. By contrast, in Mande languages, transitivity marking by means of two partially distinct paradigms of predicative markers in transitive and intransitive constructions is not uncommon, and is found in particular in Mandinka and Soninke. For example, in Soninke, the subjunctive marker has two variants: **nà** in transitive predication, and **nàn** in intransitive predication – Ex. (1).

(1) Soninke

   a. **Lémúnù-n   nàn   táaxú   yíttè-n ŋùré.**
      child.PL-D   SUBJ.INTR sit   tree-D   under
      'The children should sit under the tree.'

   b. **Lémúnù-n   nà   cíyè-n   ñígá.**
      child.PL-D   SUBJ.TR   meat-D   eat
      'The children should eat meat.'

3.3. Verbal predication in Wolof and Jóola Fooñi

In Atlantic languages, the constituent order in verbal predication is S V O X. There is no flagging of either subjects or objects, but in Wolof and Jóola Fooñi (as in most Atlantic languages), subjects and objects show a clear-cut contrast in their indexation properties: the subject is obligatorily indexed on the verb, and the presence of an NP co-referent with the subject index is optional, whereas object indexes are used only for topical objects, and if a co-referent NP is present, it can only be in dislocated position – ex. (2).

(2)   Jóola Fooñi

   a. **Á-níin-á-u   na-ju-juk   ku-ñiil-a-k.**
      CLa-man-CLa-D   CLa-RDP-see   CLk-child-CLk-D
      'The man saw the children.'

   b. **Na-ju-juk   ku-ñiil-a-k.**
      CLa-RDP-see   CLk-child-CLk-D
      'He/she saw the children.'

   c. **Á-níin-á-u   na-juk-ii-juk**
      CLa-man-CLa-D   CLa-RDP-CLk-see
      'The man saw them.'

   d. **Na-juk-ii-juk**
      CLa-RDP-CLk-see
      'He/she saw them.'

3.4. Verbal predication in Mandinka and Soninke

In Mande languages, the constituent order in verbal predication is invariably S O V X, with 'predicative markers' expressing grammaticalized TAM distinctions and polarity postposed to the subject – Ex. (3). Note that this example further illustrates the possible involvement of predicative markers in transitivity marking: in Soninke, in the completive positive, the predicative marker slot remains empty if the construction is intransitive, whereas it is occupied by the transitivity marker **dì** if the construction is transitive.[2]

(3)   Soninke

   a. **Múusá qénú.**
      Moussa   fall_down
      'Moussa fell down.'

   b. **Múusá dì   Dénbà qírí.**
      Moussa TR   Demba   call
      'Moussa called Demba.'

   c. **Múusá dì   qálìsî-n kínì Dénbà yí.**
      Moussa TR   money-D give Demba   POSTP
      'Moussa gave the money to Demba.'

As a rule, in Mande languages, there is no flagging of either subjects or objects, but Soninke is an exception to this rule, since Soninke has a mechanism of differential subject marking, with an enclitic subject marker **-n** (tonally distinct from the definitness marker **-n**) used exclusively with NPs combined with the focalization marker `**yá**, or interrogative words.

   Neither Mandinka nor Soninke have indexation of either subjects or objects, and in independent assertive or interrogative clauses, null subjects or objects are not allowed. In Mandinka or Soninke,

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[2] The transitivity marker has dialectal variants **dà**, **dè**, and **dì**. **Dì** is the one used in the Diafounou (**Jàahúnú**) variety, on which this presentation is based.

the absence of an object NP in a clause headed by a potentially transitive verb implies that the verb in question is labile, and that the TAM-polarity markers sensitive to the transitive vs. intransitive distinction have the form characteristic of intransitive predication.

4. Verbal extensions coding valency changes

4.1. Valency increasing derivations

In view of the topic of this presentation, it is sufficient to observe that all four languages have causative extensions. Ex. (4) illustrates the use of the causative suffix **-ndi** in Mandinka.

(4)   Mandinka

    a. **Díndíŋ-ò   lá   dèndìk-ôo   nôo-tá**.
       child-D   GEN   shirt-D   get_dirty-CPL.POS.INTR
       'The child's shirt got dirty.'

    b. **Díndíŋ-ò   yè   à   lá   dèndìk-ôo   nó-ndì**.
       child-DEF   CPL.POS.TR   3SG   GEN   shirt-DEF   get_dirty-CAUS
       'The child soiled his shirt.'

4.1. Valency decreasing derivations

4.1.1. Depatientive derivation (antipassivization)

Of the four languages dealt with in this presentation, Soninke is the only one having a fully productive antipassive derivation, mainly used as a strategy for not specifying the patientive argument of transitive verbs in a language in which the transitive construction implies the presence of an overt object NP – Ex. (5)

(5)   Soninke

    a. **Sámáqqè-n   dì   léménè-n   qíñí**.
       snake-D   TR   child-D   bite
       'The snake bit the child.'

    b. **Sámáqqè-n   qíñí-ndì**.
       snake-D   bite-ANTIP
       'The snake bit (someone).'

Mandinka has the same requirement about the overt expression of the patientive argument of transitive verbs, but uses an antipassive periphrasis in which **ké** 'do' takes as its object the transitive verb used nominally – Ex. (6). In this periphrasis, the transitive verb is marked by a suffix **-ri** which can be analyzed as an antipassive suffix, since its presence implies that the patientive argument of the transitive verb is not overtly expressed. This is however a very atypical variety of antipassive marker, since with just one exception (**dómó** 'eat', whose antipassive form **dómó-rì** can be used as an intransitive verb), it implies nominalization of the transitive verb to which it is added.

(6)   Mandinka

    a. **Mùs-ôo   yè   màan-ôo   tǔu**.
       woman-D   CPL.POS.TR   rice-D   pound
       'The woman pounded the rice.'

    c. **Mùs-ôo   yè   tùu-r-ôo   ké**.
       woman-D   CPL.POS.TR   pound-ANTIP-D   do
       lit. 'The woman did the pounding.ANTIP.' → 'The woman pounded.'

As a rule, Atlantic languages don't have similar requirements about the expression of the patientive argument of transitive verbs, and null objects with a non-specific reading are quite common in Atlantic languages. Curiously enough, antipassive derivations are not rare among Atlantic

languages, with however a relatively low degree of productivity. Ex. (7) illustrates an antipassive use of the verbal suffix **-e** in Wolof.

(7) Wolof

a. **Xaj b-ii   du   màtt   xale y-i**
   dog   CLb-DEM   NEG.3SG   bite   child CLy-D
   'This dog does not bite children.'

b. **Xaj b-ii   du   màtt-e.**
   dog   CLb-DEM   NEG.3SG   bite-ANTIP
   'This dog does not bite'

4.1.2. Deagentive derivation

In view of the topic of this presentation, it is sufficient to observe that Mandinka has no deagentive derivation, whereas the other three languages considered in this presentation have derivational affixes of verbs productively used in anticausative function (and sometimes also for other varieties of valency reduction): Jóola Fooñi **-o** – Ex. (8), Wolof **-(k)u** – Ex. (9), and Soninke **-i** – Ex. (10). Note that, in Soninke, this suffix surfaces as a distinct segment with monosyllabic stems only; with non-monosyllabic stems, is fuses with the last vowel of the stem.

(8) Jóola Fooñi

a. **A-ñiil-a-u   na-fum-e   f-eh-a-f.**
   CLa-child-D-CLa   CLa-break-CPL CLf-egg-D-CLf
   'The child broke the egg.'

b. **F-eh-a-f   fu-fum-o-e.**
   CLf-egg-D-CLf   CLf-break-ACAUS-CPL
   'The egg broke.'

(9) Wolof

a. **Jigéen j-i   dafa   ubbi   bunt   b-i.**
   woman   CLj-D   VFOC.3SG open   door   CLb-D
   'The woman opened the door.'

b. **Bunt b-i   dafa   ubbi-ku.**
   door   CLb-D   VFOC.3SG open-ACAUS
   'The door opened.'

(9) Soninke

a. **Yúgò-n dì   wùllì-tùurìntê-n   ñóolà.**
   man-D   TR   dog-mad-D   drown
   'The man drowned the rabid dog.'

b. **Léménè-n   ñóolè   hànŋé-n   dì.   ñóolè < ñóolà + -i**
   child-D   drown.ACAUS river-D   in
   'The child drowned in the river.'

5. Transitivity prominence

5.1. Introductory remarks

Wolof, Jóola Fooñi, Mandinka, and Soninke have two possible types of coding frames for bivalent verbs: transitive coding, with the two participants encoded like the agent and the patient of core transitive verbs, and extended intransitive coding, with one of the two participants encoded like the agent of core transitive verbs, the other being encoded as an oblique. As regards the coding frames selected by bivalent verbs, the tendency to extend transitive coding to bivalent verbs that

semantically depart from the transitive prototype is much stronger in Wolof and Jóola Fooñi than in Soninke and Mandinka.

5.2. Bivalent verbs that select transitive coding in all four languages

Out of the 248 verb glosses we have selected for this study, 189 (76%) are expressed within the frame of the transitive construction in all four languages:

(10) Verbs selecting transitive coding in all four languages[3]

abandon / accompany / affect (illness>person) / answer (a question) / answer (a call) / ask / begin / bend / betray / bite / blow on / boil / bother, worry / break$_1$ (e.g. a stick) / break$_2$ (e.g. a glass) / breastfeed / budge, stir / build / burn / bury / butcher / butt / call / calm down / caress / carry on the back / carve / catch / chase away / chase in order to catch / cheat / chew, munch / circumvent, avoid / clean / clear (land) / clog / close / comb / contradict / convince, persuade / cook / cool / count / cover / cry over / cultivate / cut, chop / cut (a notch) / cut the throat / damage, ruin, spoil / darken / defeat / defend, protect / dig / dig up / dirty / do / drag / draw (water) / drink / drive / dry / eat / encircle, surround / extinguish / fill (substance>container) / filter / find / finish / fix / flatter / fold / follow / frighten / gather / get / greet / grind / hate / hear / hit, beat / help / herd / hide / host so. / hunt / increase, enlarge / injure / insult / kick / kill / knot / know / lay down / learn / lengthen / let rest / lick / light / listen / look at / look for / love, like /make / make angry / make fall / manage, supervise / marry (man>woman) / measure / milk / move / obey / open / pay / peel / pick (fruit) / pick up / pierce / pinch / plait / plant / pluck / pound / precede / prepare / pull / pull up / push / push on sth., massage / put aside, put away / put into upright position / put on (cloth) / put to shame / raise, educate / raise, lift up / read / rejoice / release / roast / rub / sadden / scatter, spread / scratch$_1$ (with fingers) / scratch$_2$ (with claws) / seat / see / set down / sew / shake / shave / show respect for / sniff / sow / split / spread out / sting / stop / suck / swallow /sweep / take / take care of / taste / tear / tell / thank, praise / tickle / tie / tire / treat / turn sth. around / turn upside down / understand / undress / untie / wait / wake / warm sth. up / wash / watch over / water / weave / weed / wet / whiten / winnow / wipe / write

This list includes not only all verbs referring to prototypical transitive events, but also many verbs referring to all kinds of events, with only two systematic exceptions that are dealt with in the following section.

5.3. Bivalent verbs that tend to select extended intransitive coding in all four languages

The two semantic types of verbs that show a strong tendency not to use transitive coding are verbs referring to naturally reciprocal events, and verbs with a <figure, ground> argument structure

(11) Verbs referring to naturally reciprocal events

	mandinka	soninké	fooñi	wolof
fight	intr.	intr.	intr.	intr.
meet	intr.	intr.	intr.	intr.
mix with	intr.	intr.	intr.	intr.
quarrel	intr.	intr.	intr.	intr.

(12) Verbs with a <figure, ground> argument structure[4]

	mandinka	soninké	fooñi	wolof
approach	intr.	intr.	tr.	tr.
climb	tr. / intr.	intr.	intr.	intr.

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[3] In our verb glosses, unless otherwise specified, English ambitransitive verbs must be understood as referring to the meaning they express in their transitive use.

[4] In this chart and the following ones, 'tr. / intr.' means that, for the meaning in question, the language in question has either two verbs selecting different coding frames, or a single verb compatible with two different coding frames.

come swh.	intr.	intr.	intr.	intr.
enter	intr.	intr.	intr.	intr.
find accomodation swh. / with so.	intr.	intr.	intr.	intr.
get down from	intr.	intr.	intr.	tr. / intr.
get out of	intr.	intr.	intr.	intr.
go swh.	intr.	intr.	intr.	intr.
leave (a place)	intr.	intr.	intr.	intr.
live swh.	intr.	intr.	intr.	intr.
move away from	intr.	intr.	tr.	tr.
reach (a place)	intr.	intr.	intr.	intr.
remain swh.	intr.	intr.	intr.	intr.
return swh.	intr.	intr.	intr.	intr.

5.4. Others

Our data include 41 verb glosses that do not belong to the semantic types for which all four languages show a preference for intransitive coding, but for which at least one of the four languages has a verb that does not select transitive coding.

(13)   Other verb glosses for which one of the four languages at least has a verb that does not select transitive coding

	mandinka	soninké	fooñi	wolof
attack	tr. / intr.	tr. / intr.	tr.	tr.
agree with	intr.	intr.	intr.	intr.
bark at	tr. / intr.	intr.	tr.	tr.
be afraid of	intr.	intr.	tr.	tr.
be ashamed of	intr.	intr.	intr.	tr.
be enough for	intr.	tr.	tr.	tr.
be familiar with	intr.	intr.	tr.	tr.
be jealous of	tr.	intr.	tr.	tr.
believe, trust	intr.	intr.	tr.	tr.
be pitiful to	intr.	intr.	tr.	tr.
bump	tr. / intr.	tr. / intr.	tr.	tr.
carry on the head	tr.	intr.	tr.	tr.
catch up	tr.	intr.	tr.	tr.
cross	tr. / intr.	tr.	tr.	tr.
curse	tr. / intr.	tr.	tr.	tr.
dream about	intr.	intr.	tr.	tr.
endure, be patient with	intr.	tr.	tr.	tr.
fit, suit	intr.	tr. / intr.	tr.	tr. / intr.
flee	intr.	intr.	tr.	tr.
forget	intr.	intr.	tr.	tr.
forgive	intr.	intr.	tr.	tr.
get angry with	intr.	intr.	tr.	tr.
get away from	intr.	intr.	tr.	tr.
get filled with	intr.	intr.	tr.	intr.
get happy about	intr.	intr.	intr.	intr.
give birth to	tr. / intr.	tr.	tr.	tr.
imitate	intr.	tr.	tr.	tr.
laugh at	tr. / intr.	intr.	tr.	tr.
lean on	intr.	intr.	intr.	intr.
marry (woman>man)	intr.	intr.	intr.	intr.

miss	intr.	tr.	tr.	tr.
overstep	intr.	intr.	tr.	tr.
please	intr.	intr.	tr.	tr.
repeat	tr. / intr.	intr.	tr.	tr.
scold	tr.	intr.	tr.	tr.
step on	tr.	intr.	tr.	tr.
stick to	intr.	intr.	intr.	intr.
touch	tr.	intr.	tr.	tr.
underestimate	intr.	intr.	tr.	tr.
want	intr.	tr.	tr.	tr.
worry about	intr.	intr.	intr.	intr.

It is immediately apparent that, as regards the tendency to extend transitive coding to bivalent verbs that do not encode prototypical transitive events, there is a sharp contrast between Mandinka and Soninke on the one hand, and Wolof and Jóola Fooñi on the other hand. The number of verb glosses in (13) lexified as verbs selecting extended intransitive coding is 31 in Mandinka, 31.5 in Soninke, but only 7 in Jóola Fooñi and 7.5 in Wolof.[5] The hypothesis of a relatively moderate degree of transitivity prominence in Mande languages, as opposed to the much higher degree of transitive prominence found in Atlantic languages, is consistent with Haspelmath's (2015) study of transitivity prominence in a world-wide sample of 36 languages including Mandinka. On the basis of the questionnaire used by Haspelmath, Mandinka ranks 20th on 36, immediately after Italian, which means that its moderate degree of transitivity prominence is comparable to that of West European languages.

6. Valency orientation: causative / anticausative pairs

Another important aspect of the transitivity system of languages is the manifestation of the semantic relationship between transitive verbs and monovalent verbs assigning a role similar to that assigned to the P argument of a transitive verb – in particular, between monovalent verbs encoding processes that can be conceptualized as occurring more or less spontaneously, or at least without a clearly identified instigator, and bivalent verbs encoding the same processes triggered by the action of an agent – Haspelmath (1993), Nichols & al. (2004). Such pairs of verbs may show no formal relationship, but they may also be related in various ways:

– the transitive use of an ambitransitive verb may imply the involvement of an active participant that is not included in the argument structure of the same verb used intransitively;
– the transitive verb may be morphologically derived from its intransitive counterpart;
– the intransitive verb may be morphologically derived from its transitive counterpart;
– the transitive verb and its intransitive counterpart may be both derived from an abstract root that has no independent existence as a verb stem (double derivation).

(14) Causative / anticausative pairs in Mandinka, Soninke, Jóola Fooñi, and Wolof

	Mandinka	Soninké	Fooñi	Wolof
begin / begin (intr.)	same	tr.>intr.	same	same
bend / bend (intr.)	same	intr.>tr.	dder	intr.>tr.
boil / boil (intr.)	intr.>tr.	intr.>tr.	intr.>tr.	intr.>tr.
break$_1$ (e.g. a stick) / break$_1$ (intr.)	same	tr.>intr.	same	same
break$_2$ (e.g. a glass) / break$_2$ (intr.)	same	tr.>intr.	tr.>intr.	same
budge / budge (intr.)	intr.>tr.	tr.>intr.	dder	dder
burn / burn (intr.)	same	same	intr.>tr.	same
calm down / calm down (intr.)	intr.>tr.	intr.>tr.	intr.>tr.	intr.>tr.
clean / be clean	intr.>tr.	intr.>tr.	intr.>tr.	intr.>tr.

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[5] In this count, the cells coded as 'tr. / intr.' have been counted as 0.5.

clog / clog (intr.)	same	same	tr.>intr.	tr.>intr.
close / close (intr.)	same	same	tr.>intr.	tr.>intr.
cool / cool (intr.)	intr.>tr.	intr.>tr.	intr.>tr.	intr.>tr.
damage, ruin, spoil / perish	same	intr.>tr.	dder	tr.>intr.
darken / get dark	intr.>tr.	intr.>tr.	intr.>tr.	intr.>tr.
dirty / get dirty	intr.>tr.	intr.>tr.	intr.>tr.	intr.>tr.
do / happen	same	same	same	–
dry / dry (intr.)	intr.>tr.	intr.>tr.	intr.>tr.	intr.>tr.
extinguish /extinguish (intr.)	same	–	tr.>intr.	same
finish / finish (intr.)	same	tr.>intr.	same	intr.>tr.
gather / gather (intr.)	intr.>tr.	intr.>tr.	intr.>tr.	tr.>intr.
hide / hide (intr.)	same	intr.>tr.	tr.>intr.	tr.>intr.
increase, enlarge / increase (intr.)	intr.>tr. same	intr.>tr.	tr.>intr.	tr.>intr.
injure / get injured	same	same	dder	tr.>intr.
kill / die	same	–	–	–
lay down / lie down	intr.>tr.	intr.>tr.	dder	intr.>tr.
lengthen / get longer	intr.>tr.	intr.>tr.	intr.>tr.	intr.>tr.
let rest / rest	intr.>tr.	intr.>tr.	dder	intr.>tr.
light / catch on fire	same	tr.>intr.	intr.>tr.	–
make fall / fall	same	intr.>tr.	–	tr.>intr.
move / move (intr.)	intr.>tr.	intr.>tr.	intr.>tr.	intr.>tr.
open / open (intr.)	same	same	tr.>intr.	tr.>intr.
pierce / get pierced	same	tr.>intr.	same	same
prepare / prepare (intr.)	intr.>tr.	–	same	intr.>tr.
put into upright position / get upright	same	intr.>tr.	intr.>tr.	intr.>tr.
raise, lift up / rise	intr.>tr.	intr.>tr.	dder	tr.>intr.
sadden / become sad	intr.>tr.	intr.>tr.	–	–
scatter, spread / scatter, spread (intr.)	intr.>tr.	same	tr.>intr.	intr.>tr. tr.>intr.
seat / sit	intr.>tr.	intr.>tr.	dder	intr.>tr.
split / split (intr.)	same	tr.>intr.	tr.>intr.	same
stop / stop (intr.)	intr.>tr.	intr.>tr.	intr.>tr.	intr.>tr.
tear / tear (intr.)	same	tr.>intr.	tr.>intr.	tr.>intr.
tire / get tired	intr.>tr.	intr.>tr.	intr.>tr.	intr.>tr.
turn sth. around turn around (intr.)	intr.>tr.	tr.>intr.	tr.>intr.	tr.>intr.
turn upside down / turn upside down (intr.)	intr.>tr.	tr.>intr.	tr.>intr.	tr.>intr.
untie / untie (intr.)	same	tr.>intr.	tr.>intr.	tr.>intr.
wake / awaken	same	tr.>intr.	tr.>intr.	tr.>intr.
warm sth. up / become warm	intr.>tr.	intr.>tr.	intr.>tr.	intr.>tr.
wet / get wet	intr.>tr.	intr.>tr.	intr.>tr.	intr.>tr.
whiten / whiten (intr.)	intr.>tr.	intr.>tr.	intr.>tr.	intr.>tr.

(15) Causative / anticausative pairs in Mandinka, Soninke, Jóola Fooñi, and Wolof (summary)

	Mandinka	Soninke	Fooñi	Wolof	average
intr.>tr.	25.5	26	18	21.5	22.75
same	23.5	7	6	7	10.875
tr.>intr.	0	13	14	15.5	10.625
not related	0	3	3	4	2.5
dder.	0	0	8	1	2.25

Among the four languages, the rate of intr.>tr. coding is slightly higher in Mandinka and Soninke than in Jóola Fooñi and Wolof, but in other respects, the contrasts in the coding of causative / anticausative pairs do not suggest correlations between valency orientation and genetic affiliation:

– among the four languages, Mandinka is the only one with a very high rate of ambitransitive verbs, whereas the other Mande language in our sample (Soninke) patterns with Jóola Fooñi and Wolof with respect to the relative importance of ambitransitivity and tr.>intr. coding;
– the relatively high rate of double derivation found in Jóola Fooñi is not shared by the other Atlantic language in the sample (Wolof).

As regards possible correlations between the meaning of individual causative / anticausative pairs and cross-linguistic tendencies in the preference for intr.>tr. or tr.>intr. coding, our findings can be compared with those of Haspelmath (1993). Among our causative / anticausative pairs, most of those that also feature in Haspelmath's (1993) list confirm the cross-linguistic tendencies observed by Haspelmath. There are however some discrepancies:

– 'gather' and 'rise' show a strong preference for tr.>intr. coding in the data analyzed by Haspelmath, but a preference for intr.>tr. coding in our data;
– 'turn' shows a preference for intr.>intr. coding in the data analyzed by Haspelmath, but a preference for tr.>intr. coding in our data.

7. Valency orientation: converse pairs

Our data include ten pairs of bivalent verbs that can be analyzed as available to code the same events with a different mapping of participant roles onto syntactic functions. As illustrated by Ex. (16), in most cases, the member of the pair that selects the most agent-like participant as its subject also selects transitive coding, whereas the other one selects extended intransitive coding.

(16) Soninke

a. **Wùllé-n   dì   léménè-n   kènù-ndí.**
dog-D   TR   child-D   be_afraid-CAUS
'The dog frightened the child.'

b. **Léménè-n kènú   wùllé-n ŋà.**
child-D   be_afraid dog-D   POSTP
'The child was afraid of the dog.'

The members of such pairs show the same possibilities of formal relationships as causative / anticausative pairs:

– they may be formally unrelated,
– they may have the same form,
– the member of the pair selecting the most agent-like participant as its subject may be derived from the other by means of a suffix typically used to increase valency,
– the member of the pair selecting the most patient-like participant as its subject may be derived from the other by means of a suffix typically used to decrease valency,
– both members of the pair may include suffixes typically used to change valency.

(17) Converse pairs in Mandinka, Soninke, Jóola Fooñi, and Wolof

	Mandinka	Soninke	Fooñi	Wolof
bother / worry	same	tr.>intr.	same	tr.>intr.
fill (substance>container) / get filled with	same	–	same	intr.>tr.
frighten / be afraid of	intr.>tr.	intr.>tr.	dder.	intr.>tr.
host so. / find accomodation with	same	intr.>tr.	dder.	intr.>tr.
love / please	–	–	–	–
make angry / get angry with	intr.>tr.	intr.>tr.	–	dder.

marry (M>F) / marry (F>M)	same	–	tr.>intr.	intr.>tr.
put to shame / be ashamed of	same	intr.>tr.	dder.	intr.>tr.
	intr.>tr.			
rejoice / get happy about	same	intr.>tr.	–	intr.>tr.
release / get away from /	–	–	–	–

(18)   Converse pairs in Mandinka, Soninke, Jóola Fooñi, and Wolof (summary)

	Mandinka	Soninke	Fooñi	Wolof	average
intr.>tr.	2.5	5	0	6	3.375
not related	2	4	4	2	3
same	5.5	0	2	0	1.875
dder.	0	0	3	1	1
tr.>intr.	0	1	1	1	0.75

Interestingly, the distribution of the possible types of coding is different from that observed for causative / anticausative pairs, with a much higher proportion of pairs showing no formal relationship, and a very low proportion of tr.>intr. coding in all four languages. But here again, we observe no particular affinity between the two Mande languages of the sample, or between the two Atlantic languages.

8. Conclusion

In this presentation, we have compared two Atlantic and two Mande languages with respect to the typological parameters of transitivity prominence and valency orientation. The main conclusion is that this systematic comparison confirms the impression that the tendency to extend transitive coding to verbs that are not prototypically transitive is much stronger in Atlantic languages than in Mande languages. By contrast, as regards valency orientation, each of the four languages has particularities it does not share with its closest relative. Although the very limited scope of our investigation does not enable us to put forward ambitious generalizations, it is interesting to observe that it nevertheless suggests that, within the limits of groups of genetically related languages, valency orientation is less stable than the degree of transitivity prominence.

Abbreviations

ANTIP = antipassive, CAUS = causative, CL = noun class, CPL = completive aspect, DEF = definite, GEN = genitive, INCPL = incompletive aspect, LOC = locative, MID = middle, NEG = negative, OBL = oblique, PASS = passive, PL = plural, POS = positive, REFL = reflexive, SG = singular

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