# Verbal prefixes mà- and rà- in Susu and lexical features of verbal stems<sup>1</sup>

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#### 1. Introduction

The prefixes  $m\hat{a}$ - and  $r\hat{a}$ - are the two most productive verbal prefixes in Susu. Although each of these two prefixes has a number of lexicalized idiomatic uses, both have a number of identifiable meanings. Moreover, the meaning of a prefixed verb can be predicted to a considerable degree from the lexical semantic features of the corresponding underived verb. This paper has two aims: the first, which is descriptive, is to systemize the available data on  $m\hat{a}$ - and  $r\hat{a}$ -; the second is to identify, for both prefixes, the relevant lexical features that influence the choice of the meaning with a given particular verb. For  $m\hat{a}$ -, a more detailed description is presented.

The third most frequent prefix in Susu, i-, has a significantly lesser degree of productivity and, therefore, most i-derivates are lexicalized. Since no generalized meanings of i- can be made so far, the scope of this paper is limited to  $m\hat{a}$ - and  $r\hat{a}$ -.

The meanings of both Susu prefixes have been described earlier only by very general labels, cf. "modalité intentionnelle" for  $r\dot{a}$ -, "modalité itérative" for  $m\dot{a}$ - in (Houis 1963: 75; 78); "causative": "valence-increasing process by which a new Effector is added to the clause" for  $r\dot{a}$ -, "distributive": "distributing a verb action over several participants", "can also distribute an event over a longer period of time then expected for the base verb" for  $m\dot{a}$ - in (Lüpke 2005: 126; 127) for Jalonke, a language closely related to Susu.

Both prefixes have parallel postpositions má and rá. Prefixes and corresponding postpositions have common etymologies and come back to nouns with locative

<sup>&</sup>lt;sup>1</sup> The paper is a revised version of a talk given at the 2<sup>nd</sup> Conference on Mande languages in St.Petersburg in 2008. I am grateful to the audience for the fruitful discussion.

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meanings, cf. e. g. (Bailleul 1986) for the etymology of corresponding Bambara postpositions. A possible diachronic development scenario for both prefix  $m\hat{a}$ - and postposition  $m\hat{a}$  has been proposed in (Šluinskij 2010).

In the context of Mande studies, the verbal prefixes in Susu are not unique, although the semantics of verbal prefixes and/or preverbs in Mande has not yet fallen in the focus of attention of linguists dealing with this language family. Keïta (1989) discusses verbal prefixes  $m\acute{a}$ -,  $r\acute{a}$ - and  $\acute{i}$ - in Dialonke, a language closely related to Susu, but deals mainly with their morphophonology and tonal contour, rather than semantics. Kakabe prefixes corresponding to the Susu  $m\grave{a}$ - and  $r\grave{a}$ - are discussed by Vydrina (2009a; 2009b). Vydrin (2009) gives a detailed description of preverbs in Dan-Gweta. It is clear that verbal prefixes and/or preverbs in different Mande languages have different semantics and different morphosyntactic features.

In the context of general linguistics and linguistic typology, verbal prefixes in Mande are to be compared with European-type (Slavic, Romance, Germanic, Ossetic, Georgian, North Caucasian) systems of verbal prefixes and/or preverbs which have been studied thoroughly. Verbal prefixes in Mande are similar to European-type prefixes, but only to a certain extent. In both cases verbal prefixes and/or preverbs are derived diachronically to locative nouns, but unlike the prefixed verbs in European languages, Susu prefixed verbs have no synchronically detected locative semantics.

In my study I used available data from different sources: first-hand data from my consultant<sup>2</sup> (C) and secondary data from existing literature: (Raimbault 1923) (R), (Houis 1963) (H), (Fofana 1992) (F), (Touré 1994) (T). All the data were summarized and systematized in a single database. Since the data for  $m\hat{a}$ - are not abundant, I give the entire lists of the attested derivates, while for  $r\hat{a}$ - only sample examples are given. Considering the restricted set of data coming from different sources, I realize that sometimes my interpretation may be disputable.

The tonal contour of a verb changes when a prefix is added. This issue is not the focus of my study, since it has been discussed by Touré (1994: 232–233). According to his description, the prefixes  $m\hat{a}$ - and  $r\hat{a}$ - themselves in Susu always have a low tone, the first vowel of the verb has a high tone, and the subsequent vowels always have a low tone; lexical tones of the unprefixed verb are, therefore, ignored. Note however that Houis (1963: 69) reports a different tonal structure of Susu prefixed verbs; Keïta (1989) reports a different tonal structure of prefixed verbs in Dialonke.

<sup>&</sup>lt;sup>2</sup> I am very indebted to Oumar Camara with whom I worked extensively in Moscow in autumn 2004 and in winter and spring 2007.

Tonal marking in the existing descriptions of Susu is rather controversial. Since tones are not in the scope of my study (and were not checked), in the examples I simply mark lexical tones based on the description of Touré (1994), as this description is the most reliable.

#### 2. Prefix mà-

#### 2.1. General overview

Generally, the prefix  $m\hat{a}$ - has been appropriately identified as an iterative / distributive marker. In the majority of cases this marker is used as a pluractional one that pluralizes an event in any sense. However, the types of pluralizing may be different. The resulting event may be distributive (i.e. involving a new participant for each repetition) or non-distributive (i.e. having a fixed set of participants for each repetition). The prefix  $m\hat{a}$ - may be used for expressing both event-internal or event-external types of pluractionality, in terms of Cusic (1981), later accepted by Wood (2007). Normally, the prefix  $m\hat{a}$ - is not used as a valency-changing tool (though there are exceptional cases). However, as a "by-product", it can either increase (1-2) or decrease (3-4) the verbal valencies.

- (1) *màlányì bárà yénsén* people TRMN disperse 'People dispersed.' (H:74)
- (2) dímé-è bárà gèmé mà-yénsèn child-PL TRMN stone MA-disperse 'Children scattered the stones.' (H:74)
- (3) *ń bárà ń xúnyà xùnyí bíí*I TRMN I younger\_sibling head shave 'I have shaved my younger brother. (H:70)
- (4) à náxà bírín mà-bíi (s)he CONS all MA-shave 'He shaved totally.' (H:70)

# 2.2. Derivates with an event-internal (multiplicative) meaning

# 2.2.1. Derivates with an event-internal (multiplicative) meaning in general

The most frequent meaning of the prefix  $m\hat{a}$ - is an event-internal pluractional meaning. It means that normally a  $m\hat{a}$ -verb is a multiplicative one used to express an

event that is internally plural and consists of a series of repeated sub-events. The corresponding unprefixed verb is used to express a single sub-event of such series.

Normally, *mà*-multiplicatives have the same argument structure as the corresponding unprefixed verbs. *mà*-multiplicatives fall into two classes: a) the less numerous multiplicatives proper (that retain the same set of participants for the whole series of sub-events, see §2.2.2) and b) the more numerous multiplicative distributives (that involve different participants for different sub-events, see §2.2.3).

All the unprefixed verbs, from which the  $m\grave{a}$ -multiplicatives are derived, have to be TELIC and (with two exceptions in the database,  $d\acute{e}g\acute{e}$  'sew' and  $x\acute{a}n\acute{n}$  'transport') express RELATIVELY BRIEF EVENTS. Note, however, that these brief events are not necessarily punctual, since at least some of them are compatible with Progressive and have, therefore, a durated phase before the natural endpoint, cf. (5).

(5) kùyéfúrè ná bòó-fè à má perspiration COP tear-PROG (s)he at 'His sweat is breaking him out.' (H:71)

Another less trivial restriction is that all unprefixed verbs from which the *mà*-multiplicatives are derived have to be TRANSITIVE (or labile used in the transitive sense).

# 2.2.2. Multiplicatives proper

Multiplicatives proper with the prefix  $m\grave{a}$ - are derived from telic verbs that denote brief events WITH NO IRREVERSIBLE RESULT (this makes the repetition of the event with the same participants possible), cf. (6-7). There are 6 unprefixed verbs in the database, from which the  $m\grave{a}$ -multiplicatives proper are derived:

- dògòtín 'pinch (once)' (T:194, 'pincer'<sup>3</sup>) > màdógòtìn 'pinch (repeatedly)' (T:214, 'pincer plusieurs fois');
- bànbá 'beat' (H:71, 'frapper'; T:189, 'frapper, battre') > màbánbà 'beat many times, flap' (H:71, 'tapoter')
- gárín 'beat, flap once' (T:182, 'taper, frapper') > màgárìn 'flap' (T:212, 'frapper plusieurs fois');
- sòxó 'pierce; prick, sting' (T:181, 'percer, piquer') > màsóxò 'slaughter' (H:82, 'poignarder');
- *xín* 'bite (once)' (T:176, 'mordre') > *màxín* 'bite (repeatedly)' (T:208, 'mordre plusieurs fois');

<sup>&</sup>lt;sup>3</sup> Exact quotations of the meaning of the verbs as given in the referenced publication are given in the brackets, except for frequently used verbs with clear meaning.

- *findí* 'become, turn, change' (H:72, 'passer d'un état dans un autre, devenir'; R:123, 'tourner, devenir'; T:189, 'devenir') > *màfíndì* 'turn repeatedly' (H:72, 'changer d'état ou faire changer d'état plusieurs fois').
- (6) nándén náxà mìxìdî bònbó stepmother CONS orphan beat 'The stepmother beat the orphan.' (H:122)
- (7) *í tó nú xìí-mà, ń náxà sìgá í mà-bónbò-fè* you when RETR sleep-HABFUT I CONS leave you MA-beat-PROG 'When you were sleeping, I came to pat you.' (H:71)

# 2.2.3. Multiplicative distributives

Multiplicative distributives with the prefix *mà*- are the most numerous group of the *mà*-derivations. They are derived from the telic verbs that denote some brief events WITH AN IRREVERSIBLE RESULT (sometimes this irreversibility is more pragmatic than logical). The lexical semantics of these verbs presumes a natural endpoint that cannot be cancelled. It is reasonable, therefore, that in an internally plural event a new participant is required for each sub-event, cf. (8-9), (10-11), (12-13). Sometimes an internally plural event is not purely distributive, but it is dispersive, because in each sub-event there is just a new part of / place for the same participant, cf. (14-15), (16-17), and not a different participant. There are 15 unprefixed verbs in the database, from which the *mà*-multiplicative distributives are derived:

- gbàlàntín 'tear out' (H:71, 'arracher qch. qui resiste') > màgbálàntìn 'tear out many objects' (H:71, 'arracher');
- bánbán 'nail down' (H:70, 'enfoncer en cognant avec un instrument') > màbánbàn 'knock up, nail down in many places' (H:70, 'clouer en employant beaucoup de pointes');
- xábá 'cut' (T:179, 'couper') > màxábà 'shear, peel' (T:210, 'tondre, couper, coiffer');
- *tálá* 'pull out (once)?' (T:178, 'arracher') > *màtálà* 'pull out (many objects)?' (T:210, 'arracher');
- bòś 'cut, tear' (H:71, 'séparer, fendre, déchirer') > màbóò 'cut, tear in many places' (H:71, 'déchirer en plusieurs endroits'; T:206, 'éplucher');
- sùxú 'catch' (H:74, 'saisir, attraper') > màsúxù 'gather, collect many objects' (H:74, 'attraper en plusieurs fois, ramasser avec une pluralité de gestes');

- báá 'take down, pick' (Т:174 'puiser, cueillir, ôter'; F:66, 'срывать') > màbáà 'take down, pick many objects, clean' (F:66);
- *xìrí* 'attach, be attached' (H:73, 'attacher') > *màxírì* 'attach many objects, tie up' (H:73, 'ficeler, panser, harnacher');
- fii'give' > màfii 'distribute, waste' (H:72, 'donner largement, prodiguer');
- dòxó 'put, seat, sit' (H:72, 'poser, asseoir'; T:180, 's'asseoir') > màdóxò 'put many objects, tell a story' (T:208, 'raconter, frequenter'; R:140, 'asseoir, raconter, dire');
- *bálán* 'close, be closed' (H:70, 'fermer, être fermé'; T:182, 'fermer') > *màbálàn* 'close many objects' (H:70, 'fermer quand il y a plusieurs ouvertures, ou encore une porte qui se rouvre toujours');
- *tòngó* 'take' (T:190, 'prendre') > *màtóngò* 'gather, collect' (T:211, 'ramasser');
- *kòó* 'take down, take away' (H:73, 'enlever'; T:175, 'ramasser') > *màkóò* 'sweep' (H:73, 'balayer'; T:206, 'balayer');
- *dégé* 'sew' (H:71, 'coudre'; R:119, 'coudre') > *màdégè* 'sew in many places, resew' (H:71, 'arranger (pantalon)');
- *xánín* 'transport' (T:183, 'transporter, emporter') > *màxánìn* 'transport many objects' (T:213, 'transporter, emporter').
- (8) à làń. í bànànìbílì gbàlàntín Χá VÍ (s)he should you SBJV this banana tree tear out 'It is necessary that you tear out this banana tree.' (H:71)
- (9) mùxú séxé xáráxì mà-gbálàntìn we.EXC herb dry MA-tear\_out '(Before we plant rice), we tear out dry herbs.' (H:71)
- (10) ná bálán sàábì rá
  this close key with
  'Lock this one.' (Lit. 'Close this one with a key'.) (H:70)
- (11) nàdε-è má-bálàndoor-PL MA-close'Close the doors.' (H:70)
- (12) à náxà yéfűrè tòngó (s)he CONS hot\_water take 'He took some hot water.' (H:89)

- (13) *mìxì-é ná kánsí mà-tóngò-fé* person-PL COP peanut MA-take-PROG 'People are collecting peanuts.' (F:72)
- (14) à mú nòń nàdé bánbán-dè (s)he NEG finish door nail\_down-INF 'He did not finish nailing the door down.' (H:70)
- (15) kàmùdérí bárà kánkìrá mà-bánbàn
  carpenter TRMN box MA-nail\_down
  'The carpenter knocked the box up (by nailing it down in many places).' (F:72)
- (16) à bárà ń má dònmá bòś (s)he TRMN I at boubou tear 'He tore my boubou.' (H:71)
- (17) yókà ndé má-bóð ń bé cassava INDF MA-tear I to 'Slice some cassava for me.' (H:71)

The following facts seem to indicate that this semantic group of  $m\grave{a}$ -derivates could diachronically be the starting point. Firstly, this group, though semantically complex, is the most numerous one. Secondly, this group includes the aforementioned dispersive subgroup and is therefore related to the locative semantics of the noun \*ma that could be the lexical source of the prefix. However, synchronically it is appropriate to interpret  $m\grave{a}$ - as a general pluractional marker, and to treat its multiplicative distributive meaning as triggered by specific semantic properties of an unprefixed verb.

There are two unprefixed verbs in this list,  $d\acute{e}g\acute{e}$  'sew' and  $x\acute{a}n\acute{n}$  'transport', that do not satisfy the condition of expressing a brief event, but still have the  $m\grave{a}$ -derivates with a multiplicative distributive meaning, cf. (18-19).

- (18) à xá wàntányí dégé-mà (s)he POSS trousers sew-HABFUT 'He sews his trousers.' (R:119)
- (19) *ń* xúnyà gìnè má ná ń wàntányí mà-dégè-fè
  I younger\_sibling woman at COP I trousers MA-sew-PROG
  'My younger sister is mending my trousers.' (H:71)

The  $m\grave{a}$ - multiplicative distributive derived from  $k\grave{>}5$  'take down, take away' is strongly idiomatic, cf. (20-21).

- (20) à náxà kápá mòndé kérén kɔśó (s)he CONS sweet\_stuff handful one take\_down 'He took down one handful of sweet stuff.' (H:73)
- (21) sìgá xándékúì mà-kóò-dè leave yard MA-take\_down-INF 'Go and sweep the yard.' (H:73)

## 2.2.4. Multiplicatives that are semantically equal to unprefixed stems

The *mà*-derivates with a multiplicative meaning which are derived from unprefixed verbs with a multiplicative meaning make another numerous group of *mà*-multiplicatives. In this case no apparent difference is attested between the unprefixed verbs' meaning and the corresponding *mà*-derivates' meaning, cf. (22-23). Presumably, the prefixed and unprefixed verbs are nevertheless different, but the difference can hardly be captured; it may be lexicalized and requires a further investigation. There are 10 unprefixed multiplicative verbs in the database from which the *mà*-multiplicatives with no semantic difference are derived:

- $k \partial n$  'lick' (H:22, 'lécher') >  $m \partial k \partial n$  'lick' (T:208, 'lécher');
- géé 'dig' (T:174, 'creuser') > màgéè 'dig' (T:206, 'deterrer, creuser');
- dìń 'pound' (H:72, 'donner des coups, piler', T:176, 'piler, heurter, cogner') > màdín 'pound' (H:72, 'piler dans un petit mortier');
- *bórón* 'trample, move one's legs' (H:71, 'agir avec des pieds'; T:182, 'piétiner') > *màbóròn* 'trample' (H:71, 'piétiner');
- sùnbú 'mix, blend, add' (T:190, 'mélanger, embrasser') > màsúnbù 'mix, blend' (T:211, 'mélanger');
- *fîlîn* 'wrap' (T:182, 'enrouler') > *màfîlìn* 'wrap' (T:212, 'enrouler, envelopper');
- *yòlón* 'fall one by one' (T:183, 'tomber un à un'; R:161, 'tomber, en parlant des feuilles d'arbres ou des graines') > *màyólòn* 'fall one by one' (T:212, 'tomber goutte a goutte');
- kàsán 'splash, scatter' (T:183, 'gicler, eclabousser') > màkásàn 'splash, scatter' (T:213, 'éparpiller');
- *fìntán* 'fan, ventilate' (T:191, 'éventer') > *màfíntàn* 'fan, ventilate' (T:213, 'éventer');
- *fùrùkú* 'rub' (T:192, 'essuyer, frotter') > *màfúrùkù* 'rub' (T:214, 'essuyer, frotter, effacer').

- (22) à ná fúndényí bórón-fè (s)he COP fonio trample-PROG 'He is trampling fonio (to thresh it).' (H:71)
- (23) *màlé mà-bóròn-yì témùi ná à rà* rice MA-trample-NMLZ time COP (s)he with 'It is time to thresh the rice.' (H:71)

#### 2.2.5. Alternatives

Alternatives with the prefix  $m\hat{a}$ - are used to express multidirectional events and are derived from VERBS THAT EXPRESS MANNER OF MOTION, cf. (24-25). The  $m\hat{a}$ -alternatives are derived from two unprefixed verbs found in the database:

- *néré* 'move, go' (H:74, 'faire une marche') > *mánérè* 'wander' (H:74, 'marcher longuement, se promener', T:208, 'se promener');
- gii 'move (intr), run' (H:73, 'courrir', T:174, 'courir, fuir') > màgiì 'run around, go round' (H:73, 'courrir de-ci de-là, gambader, éviter quelqu'un').

This class of  $m\grave{a}$ -derivates is not expected to be numerous, but one can expect to find out more  $m\grave{a}$ -alternatives derived from the verbs that express other manners of motion.

- (24) sìí bárà á gíí goat TRMN (s)he run 'The goat ran.' (F:40)
- (25) díidíi ndé á mà-gîi-fè child INDF (s)he MA-run-PROG 'A child is running about.' (C)

## 2.2.6. (Lexicalized) multiplicative-distributive causatives

There are 6 *mà*-derivates in the database that are multiplicative-distributive causatives, i.e. they express an internally plural event that involves a new participant for each sub-event and causes the event expressed by the corresponding unprefixed verb. These 6 unprefixed verbs do not form a natural class, so this meaning of the prefix *mà*- is lexicalized. Note that all 6 *mà*-derivates are to some extent idiomatic, cf. (26-27), (28):

- *yénsén* 'disperse (intr)' (H:74, 'disperser') > *màyénsèn* 'disperse to different places' (T:213, 'éparpiller');
- *bòró* 'rot, go bad' (H:71, 'pourrir', T:179, 'pourrir') > *màbórò* 'spoil everywhere' (H:71);
- *tèé* 'rise' (T:175, 'monter') > *màtéè* 'pick up' (T:207, 'remonter, retrousser');

- dón 'eat' > màdón 'feed many beings, pasture' (H:72, 'faire manger'; T:207, 'faire manger, faire paître');
- *sòlí* 'push through' (H:74, 'percer, pointer, germer') > *màsólì* 'make holes, cut out' (H:74, 'faire des trous, percer, tailler en pointe (crayon), sculpter'; T:210, 'sculpter');
- dàngí 'pass' (H:71, 'passer, depasser'; R:118, 'traverser') > màdángì 'pass (tr) many objects, finger' (T:211, 'faire passer, égrener').
- (26) sànsí bárà sólì seed TRMN push\_through 'The seeds pushed through.' (H:74)
- bálánsè (27) kámúdérí ná wúrí mà-sólì-fè, á Χá wood MA-push through-PROG (s)he lock carpenter COP SBJV hánhán á rá nail\_down (s)he with 'The carpenter makes holes in the wood in order to nail down the lock.' (H:74)
- (28) á sìgá-xì màngé xá nìngé dé mà-dón-dè (s)he leave-PRF chief POSS bull throat MA-eat-INF 'He went to feed the mouth of the chief's bulls.' (H:72)

#### 2.2.7. (Lexicalized) multiplicative causatives

In the database there are 3 cases of  $m\hat{a}$ - non-distributive multiplicative causatives, i.e.  $m\hat{a}$ -derivates expressing an internally plural event that retains the same participants for all the sub-events and causes the event expressed by the corresponding unprefixed verb. The first two cases are clear, cf. (29-30) and (31-32), the third one is doubtful, cf. (33):

- bòròxó 'be mild' (H:71, 'être mou') > màbóròxò 'make mild doing a series of actions' (H:71, 'ramollir');
- *dúlá* 'drown (intr), go down, disappear' (H:72, 'disparaître dans l'eau, sombrer, se noyer'; T:177, 's'enfoncer, se noyer') > *màdúlà* 'drown (tr) repeatedly' (H:72, 'submerger, se debattre dans l'eau, manquer de se noyer').
- ? dúndú 'keep silence' (T:188, 'se taire') > màdúndù 'calm (tr)' (T:211, 'calmer, consoler').
- (29) yí mángò-è bòròxó-xì this mango-PL be\_mild-PRF 'These mangoes are mild.' (H:71)

- (30) mùlùxúnyí mà-bóròxò lemon MA-be\_mild 'Make the lemon mild (twisting it by foot).' (H:71)
- (31) kúnkì bárà dúlá ship TRMN drown 'The ship sank.' (H:72)
- (32) dímé-è nú ná bèré-fè bàré mà-dúlà-fè child-PL RETR COP play-PROG dog MA-drown-PROG 'The children played drowning the dog.' (H:72)
- (33) *ń* tàrá bárà ń mà-dúndù

  I elder\_sibling TRMN I MA-keep\_silence
  'My brother calmed me.' (C)

## 2.2.8. (Lexicalized) discontinuatives

There are two *mà*-derivates in the database that are discontinuatives, i.e. they express an event that takes place with pauses. The corresponding unprefixed verbs express uninterrupted events, cf. (34-35). These two unprefixed verbs do not form any natural class:

- déxé 'shine' (H:71, 'donner de la lumière, eclairer, brûler') > màdéxè 'shimmer' (H:71, 'briller, miroiter, resplendir');
- *bèndún* 'drag, pull' (H:70, 'tirer'; T:191, 'tirer') > *màbéndùn* 'drag, pull with intervals' (H:70, 'tirer par petits coups, tirailler').
- (34) á bèndún ń má (s)he pull I at 'Drag it to me.' (H:70)
- (35) wó kúnkì mà-béndùn you.PL ship MA-pull 'Pull (with pauses) the ship!' (H:70)

# 2.3. Derivates with a meaning of property

# 2.3.1. Derivates with a meaning of property in general

The other pluractional meanings of *mà*- are event-external. One of them is the meaning of property. This means that *mà*-derivates are used to express a general characteristic of an individual; in contrast, corresponding unprefixed verbs express related specific events.

Among the unprefixed verbs from which *mà*-properties are derived, there is a natural class of MENTAL STATES (*kólón* 'know, be acquainted with', *gààxú* 'be afraid of', *tóóró* 'suffer', *kíníkíní* 'feel pity'<sup>4</sup>), but other verbs from which the *mà*-properties are derived do not form any natural class.

Most of *mà*-properties have an argument structure which is different from the unprefixed verbs they are derived from, both decreasing and increasing the verb's valencies. This is evidently lexicalized, i.e. one cannot predict an argument structure of a prefixed verb from the argument structure or other features of the unprefixed verb from which it is derived.

Most of *mà*-properties denote externally-oriented properties, i. e. they are related not only to the subject of the verb, but also to other individuals. The exceptions are *màsálàxùn* 'make slippery' and *màbòxùn* 'spit constantly.'

# 2.3.2. Properties

*mà*-properties with no changes in the argument structure, cf. (36-37), are derived from 4 verbs in the database. One of them (*màtínxìn* 'educate') is considerably idiomatic:

- *kàlí* 'swear' (H:73, 'jurer') > *màkálì* 'swear constantly' (H:73, 'jurer sans cesse');
- *kíníkíní* 'feel pity' (R:131, 'avoir pitié, avoir compassion') > *màkínìkínì* 'be pitiful' (T:215, 'être pitoyable');
- bòxún 'vomit, (?) spit' (H:71, 'vomir') > màbóxùn 'spit constantly' (H:71, 'cracher sans cesse');
- *tìnxín* 'be true, be right' (T:191, 'être juste, être droit') > *màtínxìn* 'educate' (T:214, 'redresser, eduquer').
- (36) á nú wèyényì fàlá, á mú kàlí-mà (s)he RETR word say (s)he NEG swear-HABFUT 'If he says any words, he does not swear.' (H:73)
- (37) bá í mà-kálì-fè stop you MA-swear-PROG 'Stop swearing every time.' (H:73)

#### 2.3.3. Property passives

3 *mà*-derivates in the database are property passives, i.e. they indicate properties and have a decreased valency compared to the corresponding unprefixed verbs. The subject

<sup>&</sup>lt;sup>4</sup> One more mental state in the database, *xónó* 'get angry', has a strongly idiomatic *mà*derivate.

of a *mà*- property passive corresponds to an object (in case of *kólón* 'know, be acquainted with'), cf. (38-39), or to a peripheral argument (in case of *bèré* 'play' and *gààxú* 'be afraid of'), cf. (40-41), of the corresponding unprefixed verb:

- *kólón* 'know, be acquainted with' (H:73, 'connaître'; T:182, 'connaître, savoir') > *màkólòn* 'be known by everyone' (H:73, 'être connu de tous');
- *bèré* 'play' (H:70, 'jouer') > *màbérè* 'be mocked' (H:70, 'se jouer de, tourner en dérision');
- gààxú 'be afraid of' (H:73, 'avoir peur'; R:125, 'craindre, appréhender, avoir peur...') > màgááxù 'be terrible' (H:73, 'être terrifiant'; T:210, 'terrifier').
- (38) *ń mú yí kólón-mà*I NEG this know-HABFUT

  'I don't know this one.' (H:73)
- (39) *í bárà só mà-kólòn-fè* you TRMN enter MA-know-PROG 'You became known by everyone.' (H:73)
- (40) *í námà gààxú bàré rá* you PROH be\_afraid dog with 'Don't be afraid of the dog.' (H:73)
- (41) yí kúyé mà-gááxù this idol MA-be\_afraid 'This idol is terrible.' (H:73)

One more unprefixed verb has a labile *mà*-derivate that can be both property and property passive:

• yélé 'laugh' (T:177, 'rire') > màyélè 'mock, be ridiculous' (T:208, 'se moquer de, être drôle').

## 2.3.4. Property causatives

Another two *mà*-derivates in the database are property causatives, i. e. they express the events that cause properties related to the events expressed by the corresponding unprefixed verbs. The object of a *mà*- property causative corresponds to the subject of the unprefixed verb, cf. (42-43), (44-45):

• *sáláxún* 'glide' (H:74, 'glisser'; T:194, 'glisser, être gluant') > *màsálàxùn* 'make slippery' (H:74, 'rendre glissant, être glissant');

- *tóóró* 'suffer' (T:186, 'souffrir, déranger'; F:58, 'переживать, страдать, беспокоиться') > *màtóór*ò 'make constantly suffer' (F:72, 'заставлять терпеть, страдать').
- (42) á bárà sáláxún mángáxórì má (s)he TRMN glide mango\_pit at 'He slipped on a mango stone.' (H:74)
- (43) từnế bárà bòxì mà-sálàxừn rain TRMN sun MA-glide 'The rain made the soil slippery.' (H:74)
- (44) *ń ná tóóró-fe*I COP suffer-PROG
  'I am suffering.' (F:58)
- (45) sénì bárà á ngá mà-tóórò Seni TRMN (s)he mother MA-suffer 'Seni made his mother (constantly) suffer.' (F:72)

One more unprefixed verb has a labile *mà*-derivate that can be both property and property causative:

• tàngá 'escape' (C; T:190, 'éviter, échapper à') > màtángà 'avoid, protect' (T:211, 'éviter, sauvegarder').

# 2.4. Derivates with a meaning of full coverage

# 2.4.1. Derivates with a meaning of full coverage in general

Another meaning of the prefix  $m\hat{a}$ - is the meaning of full coverage, where a  $m\hat{a}$ -derivate is used to express an event which involves a participant entirely.

As it can be predicted, *mà*-derivates with the meaning of full coverage can be derived from the unprefixed verbs expressing the EVENTS WITH AN INCREMENTAL THEME in the sense suggested by Dowty (1991). <sup>5</sup> It means that the progress of these events can be measured by the degree of participant involvement (that is called 'incremental theme'). In this case a *mà*-derivate denotes the natural endpoint where the participant is involved entirely.

There are unprefixed verbs which normally express events with no incremental theme that still have *mà*-derivates with the meaning of full coverage. However, in this

<sup>&</sup>lt;sup>5</sup> There is just one exceptional event with an incremental theme in the database,  $d\acute{o}n$  'eat', that has a strongly idiomatic  $m\grave{a}$ -derivate.

case, the meaning of an unprefixed verb is reinterpreted as if the event still had an incremental theme. E.g.  $s \grave{e} g \acute{e}$  'cut' has no incremental theme, and its derivate  $m \grave{a} s \acute{e} g \grave{e}$  has the meaning of full coverage. This process is lexicalized, so it is not possible to explain why certain verbs undergo this process while the others do not.

Some of the *mà*-derivates with the meaning of full coverage differ in argument structure from the unprefixed verbs they are derived from, either decreasing or increasing in valency. This option is evidently a case of lexicalization.

# 2.4.2. Full coverage derivates

*mà*-derivates with the meaning of full coverage with no changes in the argument structure, cf. (46-47), are derived from two verbs in the database:

- sègé 'cut' (H:74, 'couper avec un instrument'; T:181, 'couper') > màségè 'cut all on a wide area' (H:74, 'couper sur une grande étendue');
- *bàràbárá* 'boil (intr)' (H:70, 'bouillir à gros bouillons, ébouillanter') > *màbàràbàrà* 'be boiled / ready, be scalded' (H:70).
- (46) sìgá túgí sègé-dè leave palm\_branch cut-INF 'Go and cut the palm branches.' (H:74)
- (47) wón mìní-mà xé má, wón xá mà-ségè we.INC exit-HABFUT field at we.INC SBJV MA-cut 'We shall go to the field to uproot it completely.' (H:74)

### 2.4.3. Full coverage passives

There are two *mà*-derivates in the database that are full coverage passives, i.e. they express the meaning of full coverage and have a decreased valency compared to the corresponding unprefixed verbs. The subject of a *mà*- property passive corresponds to the object of the unprefixed verb, cf. (48-49):

- *bii* 'cut, root out, shave' (H:70, 'couper (herbes), défricher, raser (poils)'; T:174, 'raser, sarcler') > *màbii* 'cut, shave oneself completely' (H:70, 'raser dans tous les sens, ou complètement'; T:206, 'raser, sarcler');
- *tòlín* 'twist' (H:74, 'faire des torsions'; T:184, 'tordre') > *màtólìn* 'be twisted completely' (H:74).
- (48) á ná dùgí tòlín-fè (s)he COP cloth twist 'She is squeezing the cloth.' (H:74)

(49) yí wúrí mà-tólìn-xì this branch MA-twist-PRF 'This branch is completely twisted.' (H:74)

# 2.5. (Lexicalized) derivates with a more abstract lexical meaning

# 2.5.1. Derivates with a more abstract lexical meaning in general

There is a relatively large group of *mà*-derivates with a more abstract / general meaning than the unprefixed verbs they are derived from. This group is strongly idiomatic and lexicalized. It is impossible to predict the meaning of a *mà*-derivate of this group from the meaning of the corresponding unprefixed verb, neither it is possible to predict if a given verb has a *mà*-derivate with a more abstract meaning.

Some of the *mà*-derivates with a more abstract lexical meaning have an argument structure different from the unprefixed verbs from which they are derived, thus having an increased valency.

## 2.5.2. Derivates with a more abstract meaning

*mà*-derivates with a more abstract lexical meaning and with no changes in the argument structure, cf. (50-51), are derived from 7 verbs in the database:

- *sàrá* 'buy, sell' (R:151, 'préparer, vendre, acheter') > *màsárà* 'exchange' (T:209, 'échanger, transformer'; R:142, 'changer, transformer');
- xínbélí 'be cold' > màxínbèlì 'be cold, quiet, slow' (T:214, 'être calme, lent, refroidir');
- kàná 'spoil' (T:180, 'gâter') > màkánà 'dissipate, waste' (T:209, 'gaspiller');
- wáá 'cry, want' (T:175, 'pleurer, vouloir') > màwáà 'complain' (T:207, 'se plaindre');
- *tìnkán* 'study' (T:191, 'apprendre, initier') > *màtínkàn* 'learn' (C);
- *xóróxó* 'be hard, difficult' (T:192, 'être dur, difficile') > *màxóròxò* 'be resistant, oppose' (T:214, 'être resistant');
- $x \acute{\epsilon} \acute{\epsilon}$  'send on a mission' (T:175, 'envoyer en commission') >  $m \grave{a} x \acute{\epsilon} \acute{\epsilon}$  'commit, charge with' (T:207, 'confier à, mettre à la charge de').
- (50) tòxé kérén sàrá ń má hen one buy I at 'Buy / sell me a hen.' (R:151)
- (51) é bárà ń má búkí mà-sárà they TRMN I at book MA-buy 'They exchanged my book.' (F:60)

# 2.5.3. Causatives with a more abstract meaning

Two *mà*-derivates in the database are causatives with a more abstract lexical meaning, i.e. they express events that cause more general events than those expressed by the corresponding unprefixed verbs. The object of a *mà*- causative with a more abstract lexical meaning corresponds to the subject of an unprefixed verb, cf. (52-53), (54-55). A further possibility is a reflexive use of the causative *mà*-derivate (56):

- *kánkán* 'attach (intr)' (H:73, 'accrocher') > *màkánkàn* 'attach, guard, save' (H:73, 'accrocher, garder'; T:213, 'mettre en détention, conserver');
- gòró 'go down, descend' (T:180. 'descendre') > màgórò 'diminish, lower' (T:208, 'abaisser, s'asseoir').
- (52) á bárà kánkán wúrí má
  (s)he TRMN attach wood at
  'He is tied to wood (Il est accroché à l'arbre).' (H:73)
- (53) á bárà ń má kóbìrì mà-kánkàn (s)he TRMN I at money MA-attach 'He guarded my money.' (H:73)
- (54) kùlé bárà gòró monkey TRMN descend 'The monkey climbed down.' (F:78)
- (55) *ń* tàrá bárà á mà-górò
  I elder\_sibling TRMN (s)he MA-descend
  'My brother decreased it.' (C)
- (56) *í mà-górò bé* you MA-descend here 'Sit down here.' (H:64)

One more unprefixed verb has a labile *mà*-derivate with a more abstract lexical meaning that can express both a more general event and a causation of it:

• *kúyá* 'be big, be long' (T:178, 'être grand, être long') > *màkúyà* 'be distant, make distant' (T:209, 'éloigner, être loin').

# 2.6. (Lexicalized) derivates with an intensive meaning

There are four *mà*-derivates that express more intensive events than the unprefixed verbs they are derived from, cf. (57-58). These unprefixed verbs do not form any natural

class: two of them express activities, one of them designates a permanent state, and another one is a stative verb of perception. The exact meaning is defined lexically:

- *pááxú* 'be bad' (H:73, 'être mauvais, méchant'; T:185, 'être méchant') > *màpááxù* 'be very bad' (H:74, 'être devenu méchant, insupportable'; T:210, 'être déteste');
- gèrún 'swallow' (T:183, 'avaler') > màgérùn 'swallow quickly and greedily' (T:212, 'avaler rapidement et avidement');
- xàá 'wash' (H:73, 'laver'; T:175, 'laver') > màxáà 'wash; wash thoroughly' (H:73, 'laver en frottant beaucoup, avec du savon');
- tóó 'see' (C; T:175, 'voir, apercevoir') > màtóò 'look' (C; T:207, 'regarder, examiner').
- (57) yí bàré nááxú this dog be\_bad 'This dog is (permanently) angry.' (H:73)
- (58) nààrí mà-náaxù hán cat MA-be\_bad very 'The cat is (permanently) very, very angry.' (H:74)

xàá 'wash' has an unclear status in this list: the data of Houis (1963) contain clear intensive uses of màxáà, cf. (59-60), but my own first-hand data (61), as well as the data of Fofana (1992) (62), give no intensive meaning of this derivate. One can assume a semantic shift since Houis (1963).

- (59) á sìgá-xì dùgí-è xàá-dè (s)he leave-PRF cloth-PL wash-INF 'She went to wash the clothes.' (H:73)
- (60) sàfún-yí mà-xáà nàn rà-fán ń má soap-ACT MA-wash EMPH RA-be\_good I at 'I like fine washing with soap.' (H:73)
- (61) *ń* tàrá bárà á mà-xáà

  I elder\_sibling TRMN (s)he MA-wash
  'My brother washed himself.' (C)
- (62) *ń ná ń mà-xáà-fè*I COP I MA-wash-PROG

  'I am washing myself.' (F:73)

*màtóò* 'look', derived from *tóó* 'see', is a special lexicalized case of the intensive meaning where a state is converted into an activity, cf. (63-64).

- (63) *ń bárà ń tàrá tóó*I TRMN I elder\_sibling see
  'I saw my brother.' (C)
- (64) *ń* ná ń tàrá mà-tóò-fè

  I COP I elder\_sibling MA-see-PROG

  'I am looking at my brother.' (C)

# 2.7. (Lexicalized) attenuatives

There are 3 *mà*-derivates in the database that are attenuatives, i.e. they express a reduced event in comparison to the one expressed by the unprefixed verb. All the three unprefixed verbs attested to have two attenuative *mà*-derivates are VERBS OF DIRECTED MOTION, so their derivates express a shorter motion than the standard motion expressed by the unprefixed verbs, cf. (65-66), (67-68):

- *sìgá* 'leave' > *màsígà* 'move away from smb./smth.' (H:74, 's'écarter de, se pousser, reculer'; T:209, 'éloigner, reculer, déplacer');
- fáá 'come' (T:174, 'venir') > màfáà 'approach' (T:206, 'approcher');
- sóó 'enter' > màsóò 'come near, approach' (H:74, 'faire entrer dans un groupe, un tas; approcher, avancer près de'; T:207, 's'approcher, s'habiller').
- (65) *ń* tàrá bárà sìgá Kónákírí

  I elder\_sibling TRMN leave Conakry

  'My brother left for Conakry.' (C)
- (66) *ń* mà-sígà-mà wó rá
  I MA-leave-HABFUT you.PL with
  'I'll move away from you (Je m'écarterai de vous).' (H:74)
- (67) *ń bárà sóó bànxí*I TRMN enter house
  'I came home / I entered the house.' (C)
- (68) mà-sóò, ń xá xúi mé

  MA-enter I SBJV voice hear

  'Get closer to me so that I can hear your voice.' (H:74)

## 2.8. Derivates with peripheral meanings

# 2.8.1. Derivates with peripheral meanings in general

In this section the meanings of *mà*-derivates that are attested only for 1–2 verbs are listed when the semantic correlations of the *mà*-derivates and the unprefixed verbs they are derived from are clear. I assume that, since the semantic correlations are clear, one can expect more verbs in each group (of course, as well as in the main groups discussed in the previous sections); that is why, technically, subsections containing a single verb are created.

# 2.8.2. (Lexicalized) dispersives

There is one  $m\hat{a}$ -derivate in the database that is a dispersive, i.e. it is used to express the fact that an event takes place in different locations, cf. (69-70). As opposed to a more numerous group containing dispersive multiplicative distributives, here the events taking place in different locations do not have to occur jointly and therefore are not necessarily sub-events of a single event:

- *fúntú* 'distend, swell up' (H:72, 'enfler, gonfler') > *màfúntù* 'distend, swell up everywhere' (H:72, 'enfler de partout').
- (69) *ń bèlèxé bárà fúntú*I arm TRMN swell\_up
  'My arm swelled up.' (H:72)
- (70) á sànyí bírín mà-fúntù-mà nê (s)he leg all MA-swell\_up-HABFUT ASS '(If a woman is pregnant for the first time), her legs swell up everywhere.' (H:72)

## 2.8.3. (Lexicalized) frustratives

Another *mà*-derivate in the database is a frustrative, i. e. it is used to express an event that takes place in vain, in contrast to a normal event expressed by the unprefixed verb, cf. (71-72). The only unprefixed verb that has a *mà*-derivate with a frustrative meaning is a verb of activity, and the derivate denotes a vain activity:

- fén 'look for' (H:72, 'aller chercher'; T:175, 'chercher') > màfén 'look for in vain' (H:72).
- (71) á náxà yèlìbá-è fén (s)he CONS griot-PL look\_for 'He went to look for griots.' (H:72)
- é (72)í tàn nàn bárà mà-fén. kónó é sìgá-xì they MA-look for thev leave-PRF **EMPH TRMN** but you 'It was you who looked for them, but they had left.' (H:72)

# 2.8.4. (Lexicalized) pejoratives

One more *mà*-derivate in the database is pejorative, i.e. it is used to express an event that has a negative evaluation, in contrast to the neutral event:

• *fàlá* 'say' (T:180, 'dire, tresser') > *màfálà* 'criticize, slander' (T:208, 'critiquer, médire').

# 2.8.5. Derivates from non-verbal parts of speech

The prefix  $m\hat{a}$ - is also occasionally used as a verbalizer that derives verbs from other parts of speech:

- *tààlí* 'parable, proverb' (R:155, 'parabole, proverbe'; T:84, 'proverbe, fable') > *màtáálì* 'tell' (T:210, 'raconter');
- yándì 'please' (H:121, 's'il te plaît'; R:160, 's'il te plaît') > màyándì 'beg pardon' (T:211, 'prier, demander pardon').

#### 2.9. Unclear cases

A number of *mà*-derivates have an unclear (so far) semantic correlation with the unprefixed verbs they are derived from. In most cases the meaning that is added by the prefix *mà*- to the lexical meaning of the corresponding unprefixed verb is difficult to identify mainly because of insufficient data (therefore, this is to be fixed during further research).

# 2.9.1. Activities semantically close to unprefixed verbs

There are four *mà*-derivates in the database that are used to express activities which are semantically equal or close to the activities expressed by the corresponding unprefixed verbs:

- *kérí* 'pursue, chase' (T:177, 'chasser, poursuivre') > *màkérì* 'pursue, relieve' (T:209, 'poursuivre, venir en aide');
- *kíítí* 'judge' (T:185, 'juger, aller en justice') > *màkíítì* 'judge' (T:211, 'juger, aller en justice');
- *ságátá* 'follow, pursue' (T:192, 'suivre, rejoindre') > *màságàtà* 'pursue' (T:214, 'poursuivre, rejoindre');
- *gìlín* 'roast, fry' (T:183, 'griller, rôtir') > *màgílìn* 'roast, fry' (T:212, 'griller, rôtir').

# 2.9.2. Accomplishments semantically close to unprefixed stems

There are three *mà*-derivates in the database that are used to express accomplishments which are semantically equal or close to the accomplishments expressed by the corresponding unprefixed verbs:

- sòtó 'get, obtain' (T:181, 'recevoir, obtenir') > màsótò 'get, obtain, possess' (T:210, 'recevoir, obtenir, posséder');
- yòntón 'decrease tension' (T:191, 'diminuer de tension') > màyóntòn 'weaken' (T:213, 'détendre');
- yànfá 'betray, distract, deceive' (T:189, 'trahir, distraire, tromper') > màyánfà 'distract, deceive' (T:211, 'distraire, tromper').

Possibly,  $m\grave{a}$ -derivates expressing activities and accomplishments which are semantically equal or close to those expressed by the unprefixed verbs they are derived from, are obtained from the desemantization of  $m\grave{a}$ -intensives (cf. the aforementioned case of  $x\grave{a}\acute{a}$  'wash' >  $m\grave{a}x\grave{a}\grave{a}$  'wash thoroughly', later '? wash') or  $m\grave{a}$ -derivates with other meanings, but more data and further research are needed to verify this.

# 2.9.3. Derivates with an internally plural participant

Another *mà*-derivate in the database has a participant with an internally plural structure unlike the unprefixed verb from which it is derived, cf. (73-74):

- *bílín* 'encircle' (H:70, 'entourer, cerner') > *màbílìn* 'go round' (H:70, 'tourner autour'; T:212, 'contourner, tourner autour').
- (73) dònsoé-è bárà sílí bìlín hunter-PL TRMN elephant encircle 'Hunters surrounded the elephant.' (H:70)
- (74) *ń* bárà yí gèmèkóntà mà-bílìn

  I TRMN this stone\_heap MA-encircle

  'I went around this heap of stones.' (H:70)

#### 2.9.4. Transitives and causatives

There are three  $m\grave{a}$ -derivates in the database that differ from the unprefixed verbs they are derived from, having an increased valency, cf. (75-76). Either only the argument structure distinguishes the derivates from the unprefixed verbs, or there is also an idiomatic semantic difference. One of the unprefixed verbs is labile, and the  $m\grave{a}$ -derivate is restricted to transitive uses. The other two unprefixed verbs are intransitive, and the corresponding  $m\grave{a}$ -derivates are transitive. One of them is a transitive, which adds a new object and retains the subject of the unprefixed verb. Another one is a causative, and its object corresponds to the subject of the unprefixed verb:

• nóxó 'soil, be dirty' 'soil, be dirty' (T:178, 'salir'; H:90, 'être sale'; R:147, 'abîmer, tacher, salir') > mànóxò 'soil' (R:142, 'tacher, salir');

- sálí 'pray' (Т:178, 'prier'; F:67, 'молиться') > màsálì 'say prayer (over a deceased)' (F:67, 'читать молитву над умершим');
- *l''i* 'reach' (T:174, 'atteindre, trouver'; R:189, 'arriver') > *málîi* 'help' (T:206, 'aider, secourir').
- (75) *ń bárà sálí*I TRMN pray
  'I prayed.' (F:66)
- (76) é bárà fừré mà-sálì they TRMN deceased MA-pray 'They said a prayer over the deceased.' (F:67)

#### 2.9.5. Other unclear cases

In the other four unclear cases of  $m\grave{a}$ -derivates no generalization can be made at all. Intuitively, in contrast to fully idiomatic cases discussed below, here the meanings of unprefixed verbs and their  $m\grave{a}$ -derivates are interrelated, but in a very obscure way, cf. (77-78):

- *kótó* 'put one on another, stack' (H:73, 'mettre les choses les unes sur les autres'; T:178, 'entasser, empiler') > *màkótò* 'close' (T:209, 'couvrir, recouvrir');
- dàxú 'be absent-minded' (T:179, 'être fou') > màdáxù 'deceive, disappoint' (T:208, 'tromper');
- fán 'be good' (T:175, 'être bon') > màfán 'be loved' (T:207, 'être aimé');
- gàlànbú 'disagree, cross' (T:195, 'se manquer, être en désaccord, croiser') > màgálànbù 'cross, mix' (T:214, 'croiser, mélanger').
- (77) yègé kótó wood stack 'Stack the wood.' (H:73)
- (78) bàndé mà-kótò rice MA-stack 'Cover the rice (that is in the calabash).' (H:73)

# 2.10. Fully idiomatic derivates

Finally, a considerable group of *mà*-derivates are fully idiomatic, i.e. there is no synchronic semantic relation between them and the unprefixed verbs they are derived from, cf. (79-80), (81-82), (83-84):

- *mèé* 'hear, feel' (T:175, 'entendre'; R:142, 'entendre, comprendre') > *màméè* 'wait' (T:206, 'attendre');
- sáá 'put, lie down' (T:174, 'mettre, poser, coucher'; R:150', placer, mettre, déposer, se coucher') > màsáà 'swim, make love' (T:207, 'nager, faire l'amour avec');
- *tèlèxún* 'carry on one's head' (T:194, 'porter qch. sur la tête sans le tenir des mains') > *màtélèxùn* 'be eloquent' (T:214, 'être éloquent');
- *kénén* 'please' (T:182, 'plaire'; R:130 'plaire, être agréable') > *màkénèn* 'clarify' (T:213, 'affirmer, clarifier');
- *níná* 'do' (T:178, 'faire') > *mànínà* 'be similar' (T:209, 'essayer, goûter, mésurer, ressembler à');
- xốnổ 'get angry' (C; T:179, 'se fâcher, être amer') > màxốnổ 'injure' (T:210, 'blesser');
- *làń* 'agree, be necessary, must' (T:176, 'être d'accord, falloir') > *màlán* 'convoke, join' (T:208, 'rassembler, reunir').
- (79) á kừré xílísí mèé-mà (s)he tortoise smell feel-HABFUT 'He will feel a tortoise's smell.' (H:55)
- (80) ń nú á mà-méè-fè
  I RETR (s)he MA-feel-PROG
  '(While my brother was writing a letter), I was waiting for him.' (C)
- (81) á sáá-xì kóóláá búnyí (s)he lie\_down cola under 'He is lying under the cola tree.' (H:58)
- (82) sóné gbégbè ná bé, ń mú nòó-mà yé mà-sáà-dè crocodile many COP here I NEG can-HABFUT this MA-lie\_down-INF 'There are many crocodiles here, I cannot swim here.' (H:137)
- (83) ń bárà xónó ń tàrá má
  I TRMN get\_angry I elder\_sibling at
  'I got angry with my brother.' (C)
- (84) *ń bárà ń tàrá mà-xónò*I TRMN I elder\_sibling MA-get\_angry
  'I injured my brother.' (C)

# 2.11. Prefix mà: conclusion

A description of the prefix  $m\hat{a}$ - semantics in Susu is given in §2.2–2.10.

There is an evident core group of *mà*-derivates, *mà*-multiplicatives. Their main subgroups are multiplicatives proper, multiplicative distributives, multiplicatives semantically equal to unprefixed stems and alternatives. The type of the semantic subgroup of the core group can always be predicted from its lexical features:

- transitive telic verbs that express brief events with no irreversible result have multiplicative proper *mà*-derivates;
- transitive telic verbs that express brief events with an irreversible result have multiplicative distributive *mà*-derivates;
- multiplicative unprefixed verbs have multiplicative *mà*-derivates with no apparent change of the lexical meaning;
- verbs of motion manner verbs have alternative *mà*-derivates.

In the non-core groups of  $m\hat{a}$ -derivates there are also correlations between the lexical meaning of a verb and the meaning of its  $m\hat{a}$ -derivate:

- verbs that express mental states have *mà*-derivates with the meaning of property;
- *mà*-derivates with an incremental theme have *mà*-derivates with the meaning of full coverage;
- verbs of directed motion have attenuative *mà*-derivates.

These correlations are less strong, because unlike the correlations of the core group, they can be confused by lexicalization: e.g. the verb with an incremental theme *dón* 'eat' has no expected *mà*-derivate with the meaning of full coverage, but has a lexicalized *mà*-multiplicative-distributive causative *màdón* 'feed many beings, pasture'.

Other unprefixed verbs which do not participate in the discovered correlations (mainly, non-motional activities, non-brief non-incremental accomplishments), have *mà*-derivates that are lexically distributed between the mentioned groups (*mà*-derivates with different types of multiplicative meanings, with the meanings of property, of full coverage, of attenuative) and lexicalized groups.

The prefix  $m\hat{a}$ - frequently changes verbal valencies by increasing their quantity or more marginally by decreasing it. Normally, the valency-changing effect is an addition to the meaning of the prefix and not its proper function. The process of the valency-changing by  $m\hat{a}$ - is lexicalized, and not incited by any general factors.

# 3. Prefix rà-

#### 3.1. General overview

Generally, the prefix  $r\hat{a}$ - was fairly identified earlier as a causative marker. In the majority of cases this marker is used as a valency-increasing one that adds (at least semantically) a new participant, typically a new agent. However, firstly, a new participant with another semantic role can also be added, therefore this marker can also be used as an applicative, cf. (Peterson 1997; Jeong 2006). Secondly, there are also marginal non-valency-changing uses of the prefix  $r\hat{a}$ -.

## 3.2. Derivates with a causative meaning

## 3.2.1. Derivates with a causative meaning in general

Most typically,  $r\hat{a}$ -derivates have a causative meaning. It means that usually the prefix  $r\hat{a}$ - has a different syntactic subject in comparison to the unprefixed verb it is derived from; the added subject has the semantic role of an agent or an effector.

#### 3.2.2. Causatives

Causatives proper account for the majority of  $r\hat{a}$ -derivates in the database (40 cases). The prefix  $r\hat{a}$ - supplements an event with a new participant with the semantic role of an agent (if animate) or an effector (if inanimate) and with the syntactic role of a subject. The subject of an unprefixed verb from which the  $r\hat{a}$ -causative is derived becomes a direct object of the  $r\hat{a}$ -causative.

The overwhelming majority of unprefixed verbs from which the *rà*-causative are derived are INTRANSITIVE. See below for the four exceptions: two of them are reflexive verbs (i.e. they are formally transitive, but always have a reflexive pronoun as the formal direct object) and the other two are verbs of perception.

Similarly, the majority of unprefixed verbs from which the *rà*-causative are derived are UNCONTROLLED NON-AGENTIVE VERBS that initially have no agent valency and therefore easily add it to their argument structure. In the database there can be found eight verbs denoting an uncontrolled achievement, cf. (85-86), (87-88), three verbs for uncontrolled atelic processes, cf. (89-90), three verbs for uncontrolled accomplishments, cf. (91-92), four verbs for emotional states, cf. (93-94), six verbs for other states, cf. (95-96):

- *dúlá* 'drown (intr), go down, disappear' (H:72, 'disparaître dans l'eau, sombrer, se noyer'; T:177, 's'enfoncer, se noyer') > *ràdúlà* 'sink, drown (tr)' (H:72, 'couler, immerger'; T:219, 'immerger, noyer');
- *kísí* 'be saved from death' (C; T:177, 'être sauvé') > *ràkísì* 'save from death' (C; T:221, 'sauver de la mort');

- déxé 'shine' (H:71, 'donner de la lumière, eclairer, brûler') > ràdéxè 'light, inflame' (H:71, 'allumer'; T:219, 'allumer');
- *fúntú* 'distend, swell up' (H:72, 'enfler, gonfler') > *ràfúntù* 'inflate, swell' (T:226, 'gonfler, faire enfler');
- gààxú 'be afraid of' (H:73, 'avoir peur de'; R:125, 'craindre, appréhender, avoir peur...') > ràgááxù 'frighten' (H:73, 'faire peur'; T:224, 'faire peur'; F:69, 'испугать');
- bàràxá 'be mild' (H:71, 'être mou') > ràbáràxà 'make mild' (H:71, 'amollir, assouplir'; T:230, 'ramolir, assouplir').
- (85) kúnkì bárà dúlá ship TRMN drown 'The ship went down.' (H:72)
- (86) dímé-è náxà kúnkì rà-dúlà child-PL CONS ship RA-drown 'The children sank the pirogue.' (H:72)
- (87) *ń* tàrá bárà kísí

  I elder\_sibling TRMN be\_saved

  'My brother was saved (from death).' (C)
- (88) *ń* tàrá bárà ń nà-kísì

  I elder\_sibling TRMN I RA-be\_saved
  'My brother saved me (from death).' (C)
- (89) lánpuì ná déxé-fè lamp COP shine-PROG 'The lamp is on.' (Lit. 'The lamp is is shining.') (H:71)
- (90) *n* má díí bárà lánpuì rà-déxè

  I at child TRMN lamp RA-shine
  'My child turned on the lamp.' (F:68)
- (91) ń bèlèxé bárà fúntú =(69)

  I arm TRMN swell\_up

  'My arm swelled up.' (H:72)
- (92) *fóyé bárà bélà rà-fúntù* wind TRMN sail RA-swell 'The wind swelled the sail.' (H:72)

- (93) *í námà gààxú bàré rá* you PROH be\_afraid dog with 'Don't be afraid of the dog.' (H:73)
- (94) fàtú bárà dùyéré rà-gááxù
  Fatu TRMN baby RA-be\_afraid
  'Fatu frightened the baby.' (F:69)
- (95) yí mángò-è bớrớxó-xì =(29) this mango-PL be\_mild-PRF 'These mangoes are soft.' (H:71)
- (96) *í bèlèxé rà-bóròxò* you hand RA-be\_mild 'Relax your hand.' (H:71)

A significant number of unprefixed INTRANSITIVE CONTROLLED (AGENTIVE) VERBS also have *rà*-causatives. In the database there can be found 10 INTRANSITIVE TELIC CONTROLLED VERBS, cf. (97-98), (99-100), 2 INTRANSITIVE ATELIC CONTROLLED VERBS, cf. (101-102), 2 REFLEXIVE ATELIC CONTROLLED VERBS, cf. (103-104). But it is remarkable that there is a strong tendency for the *rà*-causatives of this group to trigger a reinterpretation of a controlled event as an uncontrolled one. This means that uncontrolledness is an almost obligatory feature of a *rà*-causative:

- $s\acute{o}\acute{o}$  'enter' >  $r\grave{a}s\acute{o}\acute{o}$  'bring in' (Т:217, 'faire entrer'; F:69, 'ввести, внести');
- *bìrá* 'throw oneself down, fall' (C; H:89 'tomber') > *ràbírà* 'let fall' (C; T:218, 'faire tomber, rappeler a la memoire');
- *bèré* 'play' (H:70, 'jouer') > *ràbérè* 'play with, amuse' (H:70, 'faire jouer, amuser');
- gíí 'move(intr), run' (H:73, 'courrir', T:174, 'courir, fuir') > ràgíì 'move, drive' (C; T:216, 'faire courir, faire fuir').
- (97)  $\acute{n}$   $b\acute{a}r\grave{a}$   $s\acute{o}\acute{o}$   $b\grave{a}nx\acute{i}$  = (67)

  I TRMN enter house

  'I came home / I entered the house.' (C)
- (98) pòótì rà-sóò cup RA-enter 'Bring the cup in.' (F:69)
- (99) *ń tàrá bárà bìrá bóxì fárì*I elder sibling TRMN throw oneself ground on

'My brother threw himself on the ground.' (C)

- (100) ń tàrá bárà bònfóe rà-bírà
  I elder\_sibling TRMN bag RA-throw\_oneself
  'My brother let fall his bag.' (C)
- (101) dímé-dí ná bèré-fè búùl rá child-DIM COP play-PROG ball with 'The chidren are playing ball.' (H:70)
- (102) kùlé-dí ná é rà-bérè-fè monkey-DIM COP 3PL RA-play-PROG 'The little monkey is amusing them', (H:70)
- (103) sii bárà  $\acute{a}$  gii = (24) goat TRMN (s)he run 'The goat ran.' (F:40)
- (104) *n* ná mà-tìnkàn-fè wò tó à rà-gî-dè
  I COP MA-study-PROG car RA-run-INF
  'I am learning to drive.' (C)

The database provides only 3 exceptional *rà*-causatives whose semantics presumes that the causee has some control over the event, cf. (105-106):

- *gbìlén* 'come back' (T:183, 'revenir, se retourner') > *ràgbílèn* 'make come back' (T:227, 'retourner, restituer'; F:69, 'возвратить');
- *kàlí* 'swear' (H:73, 'jurer'; T:180, 'jurer') > *ràkálì* 'make swear' (H:73, 'faire jurer'; T:220, 'faire jurer, prêter serment');
- *sìgá* 'leave' > *ràsígà* 'send smb.' (H:74, 'faire partir, envoyer', T:222, 'faire partir').
- (105) é bárà gbìlén é xònyí they TRMN come\_back they home 'They came back home.' (H:81)
- (106) ń sóxò bárà á xá gìnè rà-gbílèn
  I uncle TRMN (s)he POSS woman RA-come\_back
  'My uncle made his wife come back.' (F:69)

The only two transitive unprefixed verbs in the database that have  $r\dot{a}$ -causatives are a VERB OF PERCEPTION, cf. (107-108), and a VERB OF MENTAL STATE, cf. (109-110). Both have no agentive valency in their frames. Syntactically  $r\dot{a}$ -causatives derived from these

verbs differ:  $r a t \acute{o} \acute{o}$  has the same object as the unprefixed verb (and the causee is not expressed) and  $r a \acute{o} \acute{o} \acute{o}$  makes the causee its syntactic object (and the object of the unprefixed verb is not expressed):

- tóó 'see' (C; T:175, 'voir, apercevoir') > ràtóò 'show' (C);
- *kólón* 'know, be acquainted with' (H:73, 'connaître'; T:182, 'connaître, savoir') > *ràkólòn* 'let know' (H:73, 'faire connaitre, avertir, prévenir'; T:227, 'informer, prévenir'; F:70: 'сообщать, ставить в известность').
- (107) ń bárà ń tàrá tóó =(63)

  I TRMN I elder\_sibling see
  'I saw my brother.' (C)
- (108) *ń* tàrá bárà á kòbé rà-tóò I elder\_sibling TRMN (s)he occiput RA-see 'My brother showed the back of his head.' (C)
- (109)  $\acute{n}$   $m\acute{u}$   $y\acute{l}$   $k\acute{o}l\acute{o}n$ - $m\grave{a}$  = (36) I NEG this know-HABFUT 'I don't know this one.' (H:73)
- (110) é náxà xémé bírín rà-kólòn they CONS people all RA-know 'They notified all the people.' (H:73)

#### 3.2.3. Transitives

The database provides five unprefixed LABILE VERBS OF STATE IN THEIR INTRANSITIVE USES AND OF CHANGE OF STATE IN THEIR TRANSITIVE USES that have  $r\hat{a}$ -derivates with no apparent semantic difference from the transitive uses of the unprefixed verbs, cf. (111) & (112-113). Presumably, this group of  $r\hat{a}$ -derivates can be interpreted as  $r\hat{a}$ -causatives derived from intransitive uses of the labile verbs:

- dòxó 'put, seat, sit' (H:72, 'poser, asseoir'; T:180, 's'asseoir') > ràdóxò 'put, seat' (H:72, 'poser dans un but bien déterminé'; T:219, 'raccorder, faire asseoir');
- *findí* 'become, turn, change' (H:72, 'passer d'un état dans un autre, devenir'; R:123, 'tourner, devenir'; T:189, 'devenir') > *ràfíndì* 'turn (tr), put' (H:72, 'changer d'état dans un but determiné, retourner qch., faire face à'; T:225, 'transformer');
- nóxó 'soil, be dirty' (T:178, 'salir'; H:90, 'être sale'; R:147, 'abîmer, tacher, salir')
   rànóxò 'soil' (T:221, 'salir');
- sáá 'put, lie down' (T:174, 'mettre, poser, coucher'; R:150, 'placer, mettre, deposer, se coucher') > ràsáà 'put' (T:217, 'coucher qch.');

- *xìrí* 'attach, be attached' (H:73, 'attacher'; T:181, 'attacher, lier') > *ràxírì* 'unite, connect' (H:73, 'lier'; T:223, 'lier, raccorder, attacher').
- (111) é dòxó-xì nìngé kántá-dè they sit-PRF bull look\_after-INF 'They are here to take care of the bulls.' (H:72)
- (112) á ná kóté dàxó-fè sòóe fárì (s)he COP load sit-PROG horse on 'He is putting the load onto the horse's back.' (H:72)
- (113) iχá ná kébényí-è rà-dóxò é bóóré rá **SBJV** COP board-PL RA-sit they REC with you 'Let you lay these boards on one another.' (H:72)

# 3.3. Derivates with a benefactive meaning

# 3.3.1. Derivates with a benefactive meaning in general

*rà*-benefactives add a valency of a beneficiary to the argument structure of the unprefixed verbs they are derived from. The syntactic status of the beneficiary may vary: with some *ra*-benefactives the beneficiary is an adjunct, with others it is a direct object. Most of the unprefixed verbs (4 of 5 in the database) that have *rà*-benefectives are CONTROLLED (AGENTIVE) VERBS.

### 3.3.2. Benefactives with an adjunct beneficiary

There are three unprefixed CONTROLLED TRANSITIVE TELIC VERBS (two of them are strictly transitive, one is a labile verb taken in the transitive meaning) in the database, that have  $r\hat{a}$ -derivates which, having a benefactive meaning, provide a syntactically optional peripheral valency of a beneficiary expressed by the postposition  $b\hat{\epsilon}$  'to', cf. (114-115):

- *tòlín* 'twist' (H:74, 'faire des torsions'; T:184, 'tordre') > *ràtólìn* 'twist for smb.' (H:74);
- *bii* 'cut, root out, shave' (H:70, 'couper (herbes), défricher, raser (poils)'; T:174, 'raser, sarcler') > *ràbii* 'cut, shave, root out for smb.' (H:70, 'se raser, défricher un endroit déterminé'; T:215, 'ouvrir, inaugurer');
- bálán 'close, be closed' (H:70, 'fermer, être fermé'; T:182, 'fermer') > ràbálàn 'close for smb.' (H:70).
- (114) á ná dùgí tòlín-fè = (46) (s)he COP cloth twist 'She is squeezing the cloth.' (H:74)

(115) *n* xùnyí rà-tólìn *n* bế

I head RA-twist I to

'Twist my head for me (i.e., braid my hair).' (H:74)

# 3.3.3. Benefactives with an object beneficiary

There are two unprefixed INTRANSITIVE VERBS (one of them is a controlled verb of process, while the other is an uncontrolled verb of state) in the database, which have *rà*-derivates with a benefactive meaning. These derivates have a direct object valency of a beneficiary, cf. (116-117), (118-119):

- sálí 'pray' (Т:178, 'prier'; F:67, 'молиться') > ràsálì 'bless' (F:67, 'проводить молитвой, благословить');
- *nááxú* 'be bad' (H:73, 'être mauvais, méchant'; T:185, 'être méchant') > *rànááxù* 'be malicious with smb.' (H:73, 'être méchant envers quelqu'un'; T:224, 'haïr, detester').

(116) 
$$\acute{n}$$
  $b\acute{a}r\grave{a}$   $s\acute{a}l\acute{l}$  = (75)

I TRMN pray

'I prayed.' (F:66)

(117) sáliálimámí bárà mùxú rà-sáli imam TRMN we.EXC RA-pray 'The imam blessed us.' (F:67)

(119) yí gìné á xúnyà rà-nááxù this woman (s)he younger\_sibling RA-be\_bad 'This woman is malicious with her younger brother.' (H:74)

# 3.4. Derivates with an abstract applicative meaning

# 3.4.1. Derivates with an abstract applicative meaning in general

A number of unprefixed TRANSITIVE CONTROLLED TELIC VERBS in the database have  $r\hat{a}$ -derivates that add a new semantic valency of a specific purpose or manner. In the available data this valency is never expressed syntactically and is present only in the meaning of the  $r\hat{a}$ -derivates of this group.

# 3.4.2. Applicatives specifying purpose

Nine *rà*-derivates in the database derived from TRANSITIVE CONTROLLED TELIC VERBS are used to express actions performed with a specific purpose. It means that

semantically (but not syntactically) a new purpose argument is added to the argument structure of the corresponding unprefixed verbs, cf. (120-121), (122-123):

- xàá 'wash' (H:73, 'laver'; T:175, 'laver') > ràxáà 'wash with a specific purpose' (H:73; T:218, 'laver');
- *bèndún* 'drag, pull' (H:70, 'tirer'; T:191, 'tirer') > *ràbéndùn* 'drag, pull with a specific purpose' (H:70, 'tirer dans une intention bien déterminée');
- bànbá 'beat' (H:71, 'frapper'; T:189, 'frapper, battre') > ràbánbà 'beat to a certain target' (H:71 'frapper dans un but déterminé');
- dón 'eat' > ràdón 'eat with a specific purpose' (H:71, 'manger dans un but déterminé, remanger');
- *fàlá* 'say' (T:180, 'dire, tresser') > *ràfálà* 'arrange' (T:219 'préparer, arranger');
- *fén* 'look for' (H:72, 'aller chercher'; T:175, 'chercher') > *ràfén* 'look for with a specific purpose' (H:72);
- kòó 'take down, take away' (H:73, 'enlever'; T:175, 'ramasser') > ràkóò 'take away with a specific purpose' (H:73, 'enlever dans une intention déterminée'; T:216, 'ramasser, enlever');
- xin 'bite (once)' (T:176, 'mordre') > raxin 'crack' (T:218, 'couper avec les dents');
- *fii* 'give' > *ràfii* 'propose' (H:72, 'offrir').
- (120) á sìgá-xì dùgí-è xàá-dè =(59) (s)he leave-PRF cloth-PL wash-INF 'She went to wash the clothes.' (H:73)
- (121) *í* bèlèxé rà-xáà, wón fá bàndé dón you hand RA-wash we.INC come rice eat 'Wash your hands, we are going to eat rice.' (H:73)
- (122) á náxà yèlibá-è fén =(71) (s)he CONS griot-PL look\_for 'He went to look for griots.' (H:72)
- (123) *í námà ń rà-fén gèré rá*you PROH I RA-look\_for quarrel with
  'Don't look for me with the purpose of a quarrel.' (H:72)

#### 3.4.3. Applicatives specifying manner

Similarly, three *rà*-derivates in the database derived from TRANSITIVE CONTROLLED TELIC VERBS are used to express actions performed in a specific manner, cf. (124-125):

- bòś 'cut, tear' (H:71, 'séparer, fendre, déchirer'; T:175, 'déchirer') > ràbśò 'cut up' (H:71; T:215, 'entailler, éventer');
- dégé 'sew' (H:71, 'coudre'; R:119, 'coudre') > ràdégè 'sew in a particular way' (H:71, 'coudre un sac plein, découdre, ficeler un rôti');
- *sègé* 'cut' (H:74, 'couper avec un instrument'; T:181, 'couper') > *ràségè* 'cut, hatch' (H:74; T:221, 'éclore, couper').
- (124) à bárà  $\acute{n}$  má dònmá bòó = (16) (s)he TRMN I at boubou tear 'He tore my boubou.' (H:71)
- (125) yènxéè rà-bóò fish RA-tear 'Cut up the fish.' (H:71)

## 3.5. Derivates with non-valency-changing meanings

A few *rà*-derivates in the database have the same argument structure as the unprefixed verbs they are derived from. These include semelfactives and fully idiomatic derivates.

# 3.5.1. Semelfactives

Two unprefixed TRANSITIVE CONTROLLED MULTIPLICATIVE VERBS in the database have  $r\dot{a}$ -derivates with a semelfactive meaning. This means that a  $r\dot{a}$ -derivate designates a sub-event from the series of sub-events expressed by the corresponding unprefixed verb, cf. (126-127). Since the database contains no other  $r\dot{a}$ -derivates from transitive multiplicative verbs, one can assume that this meaning is standard for them:

- *bórón* 'trample, move one's legs' (H:71, 'agir avec des pieds'; T:182, 'piétiner') > *ràbóròn* (H:71 'donner un coup de pied'; F:69, 'пинать');
- *dìń* 'pound' (H:72, 'donner des coups, piler'; T:176, 'piler, heurter, cogner') > *ràdín* 'pound once' (H:72, 'heurter, bousculer, pousser devant soi'; T:217, 'heurter, pousser'; F:68, 'толкать').
- (126) á ná á xá kừ ré bórón-fè (s)he COP (s)he POSS bicycle trample-PROG 'He is riding his bicycle.' (Lit. 'He is trampling his bicycle.') (H:71)
- (127) Fódé bárà báré rà-bóròn Fode TRMN dog RA-trample 'Fode kicked the dog.' (F:69)

## 3.5.2. Fully idiomatic derivates

There are three unprefixed TRANSITIVE CONTROLLED TELIC VERBS in the database that have fully idiomatic  $r\hat{a}$ -derivates, i.e. there is no synchronic semantic correlation between  $r\hat{a}$ -derivates and the unprefixed verbs they are derived from, cf. (128-129):

*báá* 'take down, pick' (Т:174 'puiser, cueillir, ôter'; F:66, 'срывать') > *ràbáà* 'do' (Т:215, 'faire'; F:66, 'сделать');

*tálá* 'pull out (once)?' (T:178, 'arracher') > *ràtálà* 'unreel, spread out' (T:222, 'étendre, dérouler');

 $s \partial t \delta$  'get, obtain' (T:181, 'recevoir, obtenir') >  $r \partial s \delta t \delta$  'offend, insult' (T:222, 'insulter').

- (128) mómó mángò-è báá-fè

  Momo mango-PL pick-PROG

  'Momo is picking mangoes.' (F:66)
- (129) á bárà wàlí rà-báà (s)he TRMN work RA-pick 'He did the work.' (F:66)

# 3.6. Prefix rà-: conclusion

A description of the semantics of the prefix  $r\hat{a}$ - in Susu has been given in §3.2–3.5.

There is an evident regular core group of *rà*-derivates and unprefixed verbs they are derived from: *rà*-causatives derived from uncontrolled intransitive verbs.

Other *rà*-causatives are derived as follows:

- *rà*-causatives can be derived from conrolled intransitive verbs, but in this case there is a strong tendency for the event to be reinterpreted as an uncontrolled one;
- *rà*-causatives can be derived from a marginal group of uncontrolled transitive stative verbs;
- labile verbs of state in their intransitive uses and verbs of change of state in their transitive uses derive *rà*-causatives from their intransitive meaning, and these derivates have therefore no apparent semantic difference with their transitive uses.

Controlled transitive telic verbs have *rà*-derivates with other meanings, and the distribution of these meanings is mainly lexical:

- some transitive telic verbs derive *rà*-benefactives;
- some transitive telic verbs derive *rà*-applicatives specifying purpose;
- some transitive telic verbs derive *rà*-applicatives specifying manner;
- some transitive telic verbs derive fully idiomatic *rà*-derivates.

There is also a small group of intransitive unprefixed verbs that derive *rà*benefactives.

Multiplicative verbs derive *rà*-semelfactives.

Admittedly, there are no  $r\hat{a}$ -derivates in the database that are derived from transitive verbs of non-mentioned semantic types – e.g. atelic agentive verbs, telic effector verbs. Such derivates may be impossible in Susu, but this requires further research.

#### 5. Conclusion

A description of the meanings of the two most productive verbal prefixes in Susu,  $m\hat{a}$ - and  $r\hat{a}$ -, has been given in this paper. It has been shown that both prefixes have core meanings and more marginal meanings. Core meanings that are held by the majority of the prefixed derivates strongly correlate with lexical semantic features of the verbal stems they are derived from. More marginal meanings have weaker correlations, and are frequently defined lexically.

#### **Abbreviations**

ACT – 'actualizer'	NEG – negation
ACI – actualizei	NEG – negation

ASS – assertive NMLZ – nominalization

CONS – consecutive PL – plural

COP – copula POSS – possessivity

EMPH – emphatic particle PRF – perfect

EXC – exclusive 1<sup>st</sup> plural PROG – progressive

FOC – focal particle PROH – prohibitive

HABFUT – habitual-future RA – the prefix  $r\hat{a}$ -

INC – inclusive 1<sup>st</sup> plural REC – reciprocal

INDF – indefinite RETR – retrospective

INF – infinitive SBJV – subjunctive

intr – intransitive tr – transitive

MA – the prefix  $m\hat{a}$  – TRMN – terminative

#### **Sources**

C – consultant, F – (Fofana 1992), H – (Houis 1963), R – (Raimbault 1923), T – (Touré 1994).

#### References

Bailleul, Charles. 1986. Sens originel des postpositions en Bambara. Mandenkan 11. 71-74.

- Cusic, David D. 1981. *Verbal plurality and aspect*. Stanford: Stanford University. (Ph.D. dissertation.)
- Dowty, David. 1991. Thematic proto-roles and argument selection. *Language* 67(3). 547–619.
- Fofana, Mori-Saidu. 1992. *Sintaksis prostogo predloženija v jazyke analitičeckogo tipa (na materiale jazyka soso)* [Syntax of a simple sentence in an analytic language (the Soso case)]. Moscow: Institute of Linguistics RAS. (Ph.D. dissertation.) = **F**
- Houis, Maurice. 1963. Étude descriptive de la langue Susu. Dakar: Université de Dakar. = H
- Jeong, Youngmi. 2006. *The landscape of applicatives*. College Park: University of Maryland. (Ph.D. dissertation.)
- Keïta, Boniface. 1989. Les préverbes du dialonké. Mandenkan 17. 69-80.
- Lüpke, Friederike. 2005. *A grammar of Jalonke argument structure*. Nijmegen: Radboud Universiteit. (Ph.D. dissertation.)
- Peterson, David. 1997. Discourse-functional, historical, and typological aspects of applicative constructions. Leipzig: MPI-EVA. (Ph.D. dissertation.)
- Raimbault, R. P. 1923. *Dictionnaire Français-Soso et Soso-Français*. Rome: Sodalité de St. Pierre Claver. = **R**
- Šluinskij [Shluinsky], Andrej B. 2010. Vse puti vedut v Rim, ili o pokazateljax ma v jazyke Susu [All roads lead to Rome, or On the ma markers in Susu]. In Dem'jankov, Valerij, & Porxomovskij, Viktor (eds.), *V prostranstve jazyka i kul'tury: zvuk, znak, smysl. K 70-letiju V. A. Vinogradova*, 317–331. Moscow: Jazyki slavjanskix kul'tur.
- Touré, Aboubacar. 1994. *Eléments de description de la langue Soso*. Grénoble: Université de Grénoble. (Thèse de doctorat.) = **T**
- Vydrin, Valentin F. 2009. Preverby v jazyke dan-gueta [Preverbs in Dan-Gweta]. *Voprosy jazykoznanija* 2. 75–84.
- Vydrina, Aleksandra V. 2009a. Pokazatel' glagol'noj množestvennosti v jazyke kakabe [A marker of the verbal plurality in Kakabe]. In Vydrin, Valentin F. (ed.), *Afrikanskij sbornik 2009*, 269–288. St. Petersburg: Museum of Anthropology and Ethnography.
- Vydrina, Aleksandra V. 2009b. *Argumentnaja struktura i aktantnye derivacii v jazyke kakabe* [Argument structure and valency-changing derivations in Kakabe]. St. Petersburg: St. Petersburg State University. (M.A. dissertation.)
- Wood, Esther J. 2007. *The semantic typology of pluractionality*. Berkeley: University of California. (Ph.D. dissertation.)

# Préfixes verbaux *mà*- et *rà*- en susu et des traits lexicaux des bases verbales Andrey Shluinsky

L'article offre un analyse systématique des données disponibles concernant les deux préfixes verbaux les plus productifs de la langue susu, *mà*- et *rà*-. D'une part, chacun de ces préfixes a un ensemble de sens mutuellement liés, et le choix du sens dépend largement des caractéristiques sémantiques de la base verbale. D'autre part, chacun des préfixes manifeste de nombreux emplois lexicalisés.

**Mots clé :** susu, soussou, préfixes verbaux, sémantisme lexical, pluriactionnalité, structure argumentale.

# Verbal prefixes *mà*- and *rà*- in Susu and lexical features of verbal stems Andrey Shluinsky

This paper presents a systematic analysis of the available data related to the two most productive verbal prefixes in Susu,  $m\hat{a}$ - and  $r\hat{a}$ -. On the one hand, each of the two prefixes has a number of semantically interrelated meanings, and the choice of a particular meaning depends, to a significant extent, on the lexical semantic features of the verbal stem. On the other hand, there are many lexicalized uses of both prefixes.

**Keywords:** Susu, verbal prefixes, lexical semantics, pluractionality, valency-changing, argument structure.

# Глагольные приставки *mà*- и *rà*- в сусу и лексические признаки глагола Андрей Болеславович Шлуинский

В статье систематизированы данные об употреблении двух наиболее продуктивных глагольных приставок в языке сусу, *mà*- и *rà*-. С одной стороны, у каждой из приставок представлен набор взаимосвязанных значений, причем выбор значения в значительной мере определяется семантическими признаками глагола. С другой стороны, у каждой из приставок есть многочисленные лексикализованные употребления.

**Ключевые слова:** язык сусу, глагольные приставки, лексическая семантика, предикатная множественность, актантаная деривация, аргументная структура.