DEVELOPMENT OF TAM AND POLARITY MARKING CONDITIONED BY TRANSITIVITY STATUS IN WESTERN MANDE

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- **2 tones**: L vs H, L vs Ø, L vs Ø vs H
- downdrift, downstep, different types of **prosodic boundaries**
- canonical syllable structure: **CV(N)**
- only a **few V-initial morphemes**: personal pronouns, functional morphemes, borrowings
- limited inflectional morphology
- suffixing
- **rigid** S (O) V X order
- TAMP (tense, aspect, mood, polarity) tend to be expressed syncretically but can be distributed across as many as 4 sites within the clause:

\[ \text{TAMP}_0 \text{ S } \text{TAMP}_1 \text{ (O) V-TAMP}_2 \text{ X TAMP}_3 \]

* TAMP\(_1\) aka Predicative Marker or AUX
- **rigid SOVX** constituent order
- **obligatory S** (except for imperatives)
- in a transitive construction: **obligatory O** (except in Bobo and Boko-Busa cluster)
- minimally, **O slot** is filled with a **dummy 3SG** pronoun (such as à in Greater Manding)
- typically, S and O are separated by **TAMP₁** marker
- in some languages, detransitivizing and transitivizing **verbal derivational affixes**
In Greater Manding and Soninke, transitivity status may condition the choice of TAMP marking in clauses with certain TAMP values.

Mandinka of Sédhiou (Creissels 2013:62)

(1) a. \(\text{PFV}^+_1\): \(-t\text{á} (\text{TAMP}_2)\)

\begin{align*}
\text{sùl-óo} & \quad \text{sèlè-tà} & \quad \text{yír-ôo} & \quad \text{sàntò} \\
\text{monkey-ART} & \text{climb-PFV.I} & \text{tree-ART} & \text{at.the.top}
\end{align*}

‘The monkey climbed to the top of the tree.’

b. \(\text{PFV}^+_T\): \(y\text{é} \sim ñ\text{á} (\text{TAMP}_1)\)

\begin{align*}
\text{sùl-óo} & \quad \text{yè} & \quad \text{yír-ôo} & \quad \text{sèlè} \\
\text{monkey-ART} & \quad \text{PFV.T} & \text{tree-ART} & \text{climb}
\end{align*}

‘The monkey climbed the tree.’
Mandinka of Sédhiou (Creissels 2013:70, 181)

(2) a. $\text{PFV}_I^- : \text{máŋ} (\text{TAMP}_1)$

\[
\text{úy mán ’síláŋ féŋ ná jáŋ}
\]

1SG PFV.NEG fear thing OBL here

‘The monkey climbed to the top of the tree.’

b. $\text{PFV}_T^- : \text{máŋ} (\text{TAMP}_1)$

\[
\text{úy mán móórí jé jèè}
\]

1SG PFV.NEG marabout see there

‘The monkey climbed the tree.’
the **range of TAMP constructions involved** varies across the languages according to:

- **polarity**: always some positive constructions, sometimes also some negative constructions
- **TAM**: always $PFV^+$, sometimes also $IPFV$, $PROG$, $SUBJ$, $IMP$

For instance, in **Mandinka** of **Sédhiou**:

<table>
<thead>
<tr>
<th>Transitivity status</th>
<th>Intransitive</th>
<th>Transitive</th>
</tr>
</thead>
<tbody>
<tr>
<td>$PFV^+$</td>
<td>-tá</td>
<td>$TAMP_2$</td>
</tr>
<tr>
<td>$PFV^-$</td>
<td>máŋ$^L$</td>
<td>$TAMP_1$</td>
</tr>
<tr>
<td>$IPFV^-$ (__V-lá)</td>
<td>té$^L$-tí$^L$</td>
<td>$TAMP_1$</td>
</tr>
<tr>
<td>$PROG^-$ (__V-kàŋ)</td>
<td>té$^L$-tí$^L$</td>
<td>$TAMP_1$</td>
</tr>
</tbody>
</table>
DIFFERENTIAL TAMP MARKING: TWO TYPES

- the type involving **similar TAMP makers** (**SIM** type), actually only similar TAMP$_1$ markers which differ only at their right edge:
  - **tonal SIM** type: floating $^1$ vs. its absence (e.g., Mandinka máŋ$^1$ vs. máŋ)
  - **segmental SIM** type: final nasal vs. its absence (e.g., Soninke nàn vs. nà)

- the type involving **different TAMP makers** (**DIF** type), such as:
  - TAMP$_1$ marker vs. TAMP$_2$ marker (e.g., Mandinka yé ~ ŋá vs. -tâ)
  - TAMP$_1$ marker vs. zero (e.g., Soninke dà vs. ∅)
  - *(TAMP$_1$ marker vs. a different TAMP$_1$ marker)*

In the case of **SIM** type, the difference in TAMP marking allows for two analyses:

- **two TAMP markers** → TAMP marking is conditioned by *transitivity status* of the construction
- one TAMP marker with **two allomorphs** → TAMP marking is conditioned by *its right context* / the type of *prosodic boundary to its right*

The choice between the two analyses depends on our **goals**: 

- **explanatory adequacy** (diachronic & comparative perspective) → **two allomorphs**
- **descriptive simplicity** (synchronic perspective) → it depends on the language

(e.g., Mandinka of Sédhiou vs. Jula of Kong or Kakabe)
The relation with transitivity status is **indirect** (correlation, not conditioning)

**Differential phonological evolution** of a single TAMP₁ marker as a function of its right context: N (◊ O) vs. anything else

This also explains why SIM type involves **only TAMP₁ markers** and affects only their **right edge**.

**Frequency effects:**

In Cₜ (but never in Cᵢ), TAMP₁ is frequently followed by a **3SG pronoun à** that has **L tone** (◊ tonal SIM type) and is **V-initial** (◊ segmental SIM type).
Patterns of **Western Mande phonotactics:**

- **segmental** (segmental SIM):
  - verbs begin with C, but 3SG pronoun à is V-initial
  - word-final nasals tend to be deleted before vowel (C), but be preserved before consonant (C & C)

<table>
<thead>
<tr>
<th>Soninke:</th>
<th>Intransitive₁</th>
<th>Transitive</th>
</tr>
</thead>
<tbody>
<tr>
<td>SUBJ⁺ (TAMP₁)</td>
<td>nàn</td>
<td>nà</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Standard Bamana:</th>
<th>Intransitive</th>
<th>Transitive</th>
</tr>
</thead>
<tbody>
<tr>
<td>PFV⁻ (TAMP₁)</td>
<td>má</td>
<td></td>
</tr>
<tr>
<td>QUAL⁻ (TAMP₁)</td>
<td>màn /má/</td>
<td>—</td>
</tr>
<tr>
<td>(&lt;<em>PFV⁻</em>)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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**Notes:**
- **Soninke:**
  - Intransitive: SUBJ⁺ (TAMP₁) nàn nà
  - Transitive: SUBJ⁺ (TAMP₁) nàn nà

**Standard Bamana:**
- Intransitive: PFV⁻ (TAMP₁) mà
- Transitive: màn /má/
Patterns of **Western Mande phonotactics**:

- **tonal** (tonal SIM):
  - when two L tone domains meet at the word boundary, one of the two L tone domains tend to be retracted (usually, the first one)
  - L tone of a 3SG pronoun is the L tone that is most resistant to delinking or deletion
  - floating L that does not originate in the L tone of the 3SG pronoun tends to be deleted (floating L deletion in C_T before à 3SG)
  - In some languages (such as Jula of Kong), H tone spreads rightwards over the word boundary (floating L preservation in C_T before à 3SG)

<table>
<thead>
<tr>
<th>Intransitive</th>
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<tr>
<td><strong>Mandinka of Sédhiou:</strong></td>
<td>PFV¯ (TAMP₁)</td>
</tr>
<tr>
<td><strong>Jula of Kong:</strong></td>
<td>PFV¯ (TAMP₁)</td>
</tr>
</tbody>
</table>
DIF type is attested for a limited number of positive constructions:

- **PFV** constructions in Soninke and most Greater Manding languages
- two constructions historically related to **PFV** in Soninke, viz. **SUBJ** and **IMP.2PL**
- one **IPFV.FOC** construction in Soninke
• similarity in form between some $\text{TAMP}_1$ in $\text{PFV}_T^+$ constructions and postpositions

• passive and causative/anticausative P-lability typical for the relevant Western Mande languages
- **PFV** (with its TAMP\textsubscript{2} marker) is the **older** construction with originally resultative meaning and \textbf{*PFV** \textsubscript{I} \Rightarrow PFV** \textsubscript{T}}

- **agentive postposition** (of a topicalized NP) \textgreater TAMP\textsubscript{1} in PFV** \textsubscript{T}

(3) *PFV** \textsubscript{I} with a fronted (topicalized) oblique: \[
\begin{array}{cccc}
\text{[NP]} & \text{PP}_{\text{OBL}} & \text{[NP]}_{\text{S}} & \text{V-} \text{TAMP}_{\text{2}} \\
\downarrow & \downarrow & \downarrow & \downarrow \\
\text{PFV}^{+}_{T} & \text{[NP]}_{\text{S}} & \text{TAMP}_{\text{1}} & \text{[NP]}_{\text{O}} & \text{V}
\end{array}
\]
(3) $^*\text{PFV}_T^+$ with a fronted (topicalized) oblique:

\[
\Downarrow \quad \Downarrow \quad \Downarrow \quad \Downarrow
\]

PFV_{T}^+:

\[
[\text{NP}]_S \quad \text{TAMP}_1 \quad [\text{NP}]_O \quad \text{V}
\]

(4) **As for me, the letter is written** > **I have written the letter**

*as for* > TAMP\textsubscript{1} in PFV\textsuperscript{+}\textsubscript{T}

*me* > I\textsubscript{S}

*the letter*\textsubscript{S} > *the letter*\textsubscript{O}
Although typologically plausible, this account is not natural within Mande morphosyntax:

- the presumed source construction, viz. \( *PFV^+_I \) with a fronted (topicalized) agentive oblique is extremely rare in West Africa and absent in Mande

- most relevant languages disallow or strongly disprefer expressing the agent or the person concerned as oblique in passive/anticausative intransitive constructions

- difficult to account for the deletion of the original TAMP\(_2\) suffix & its uniform character across Greater Manding despite that the change in (3) must have occurred independently across Greater Manding
Merger of two constructions, \( C_1 \) and \( C_2 \), as variants of the new construction \( C' \) (i.e. the present-day PFV\(^+\) construction)

- construction \( C_1 \) – primarily intransitive
- construction \( C_2 \) – largely indifferent to transitivity

Specialization of \( C_1 \) as the intransitive variant \( C'_I \) of \( C' \)

Specialization of \( C_2 \) as the transitive variant \( C'_T \) of \( C' \)
The construction $C_1$, the source of $PFV_1^+$, was a construction based on a **perfective participle** $[V\text{-PTCP}.PFV]$:

- as the **complement of a COP** in the **RES** construction $[S\ COP\ V\text{-PTCP}.PFV]$ (or less likely, $[S\ V\text{-PTCP}.PFV\ COP]$)
- as a **dependent predication** $[S\ V\text{-PTCP}.PFV]$ being part of the construction $[[P_1]\_{dependent}\ P_2]$ and expressing temporal precedence of $P_1$ to $P_2$

Both the copula-based type and the dependent predication type are **very common** in Greater Manding

In most languages, they are **exclusively intransitive**

In Jogo (Kastenholz 1997), $PFV^+\ TAMP_2$ marker $-re$, **cognate** to Greater Manding $PFV_1^+\ TAMP_2$ marker $-ta$, is **indifferent to transitivity**
Independent uses of the [S V-PTCP.PFV] construction are well attested and can be explained through:

- COP loss
- insubordination

Both pathways help to account naturally for the fact that in PFV⁻ TAMP marking is not conditioned by transitivity and has the same structure as PFV⁺, viz. using a TAMP₁ marker.
Reflexes of the PFV⁺ TAMP₁ marker *kà in Greater Manding provide an example of *specialization of a TAMP₁ marker originally indifferent to transitivity status to an exclusively transitive use as PFV⁺:\n
• Typically, reflexes of the PFV⁺ marker *kà are used in PFV⁺\n• In some languages, it still allows for a limited (or fossilized) use in PFV⁺\n  (e.g., in Maninka of Kankan and Mandinka of Sédhiou)\n• One of the common reflexes of *kà is used in QUAL⁺ construction, which is exclusively intransitive due to its semantics
PFV⁺ DIF TYPE: CONSTRUCTION MERGER ACCOUNT
In WM, the **positive PFV domain** (but not the negative one!) tends to be **crowded**, with further distinctions made:
- by using motion and phasal verbs as quasi-auxiliaries ⇒ TAMP₁ markers
- by recruiting RES constructions

Some of these constructions tend to **lose their specific semantics** evolving into a general PFV⁺ construction

Due to their **semantics**, RES constructions tend to be much more common in **intransitive** uses ⇒ specialize as intransitive constructions ⇒ generalize as PFV₁⁺ ⇒ trigger the specialization *PFV⁺ > PFV⁺ₜ*. 
CONCLUSION: EXPLANATION IN LINGUISTICS

- Explanation is historical
- Explanation is construction-based
- Explanation is grounded in language use and its frequency patterns
- Explanation is largely language-specific
- Broad typological tendencies (such as the differential PFV marking conditioned by transitivity status) are largely epiphenomenal