

Distinct pathways to possessor \bar{A} -extraction in Mesoamerican languages

1. Overview. Many Mesoamerican languages are thought to permit two strategies for \bar{A} -extracting a wh-possessor: subextraction of just the wh-possessor (stranding the possessum), or pied-piping with inversion (PPWI) of the entire constituent, so that the wh-possessor precedes the possessum (Aissen 1996). Aissen & Polian (to appear) (henceforth, ‘A&P’) argue that the former strategy does not exist in Tzeltalan (Mayan) languages: putative ‘ \bar{A} -subextraction’ is actually \bar{A} -extraction of an *external possessor* that has raised out of a reduced nominal constituent. In this talk, we compare Tzeltalan to an unrelated Mesoamerican language, San Martín Peras Mixtec (Otomanguean), which we argue permits *genuine* possessor \bar{A} -subextraction out of non-reduced DPs with no intermediate possessor raising step. The surface-similar empirical profiles of Tzeltalan and SMPM thus have underlyingly divergent derivational pathways and properties. However, even in SMPM \bar{A} -subextraction is not automatically available: A-movement of the entire DP constituent is a precondition for subsequent \bar{A} -subextraction of the possessor, which we analyze as a phase ‘unlocking’ effect (Rackowski & Richards 2005; AUTHORS to appear). We also concur with A&P’s conclusion that DP-internal wh-movement resulting in PPWI (though generally available) does not feed \bar{A} -subextraction, despite surface appearances.

2. Tzeltalan vs. SMPM. Tzeltalan languages (Tsotsil, Tzeltal) are verb-initial (VOS due to a rightward spec-TP) and allow both PPWI, (1), and wh-movement of the possessor alone, (2). Importantly, the latter is possible only if the possessum is *non-specific*, which A&P take to reflect a reduced PossP structure rather than a full DP. A&P propose that an A-probe on T° raises the most local DP it finds. A DP possessor may raise out of a non-specific PossP but not out of a specific DP, as the latter creates an A-over-A intervention configuration. As independent evidence, A&P note that possessors and possessa may indeed only be discontinuous (due to possessor raising) when the latter are non-specific, (3). In contrast to the A-probe in T° , the \bar{A} -probe in C° cannot see into *any* nominals, regardless of size (a selective opacity effect; Keine 2019). Put together, all apparent \bar{A} -subextraction in Tzeltalan involves: (i) A-movement of a possessor out of a reduced PossP to a rightward specifier position and then (ii) \bar{A} -movement to a leftward spec-CP. In contrast, wh-fronting of possessors inside DPs requires PPWI.

(1) $[_{DP}$ Mach’aj s-tak’in $t_j]_i$ ch’ay t_i ? (2) Mach’aj ch’ay $[_{PossP}$ s-tak’in $t_i] t_i$?
 who A3-money lost.INTR who lost.INTR A3-money
 ‘Whose money (spec.) was lost?’ ‘Who lost some money (non-spec.)?’

(3) Ch’ay $[_{PossP}$ s-tak’in $t_i]$ ajk’ube $[_{DP}$ te x-Mal=e] $_i$
 lost.INTR A3-money yesterday DET CLF-Maria=ENC
 ‘Maria lost some (non-spec.) money yesterday.’
 #‘Maria’s money (spec.) was lost yesterday.’ (Tenejapa Tzeltal)

San Martín Peras Mixtec (hereafter, ‘SMPM’) is also verb-initial (though VP-S-O, not VOS) and allows both PPWI and possessor \bar{A} -extraction, so it offers an ideal point of comparison with Tzeltalan. Although DPs undergoing PPWI are necessarily interpreted as specific, (4), wh-movement of just the possessor is possible *regardless* of the specificity of the possessum, (5). Non-specific possessa (often introduced with *iin* ‘one’) remain in situ, as can specific possessa preceded by strong definite marker *míí*. Moreover, there is no evidence in SMPM for possessor raising: outside of \bar{A} -extraction, possessors and possessa can *never* be discontinuous. Non-wh-possessors must immediately follow the possessa, unless they are clause-initial, in which case they are interpreted as focused (hence in an \bar{A} -position), (6). Lastly, there is no SMPM-internal evidence that non-specific nominals are structurally smaller than (or behave differently from) specific ones, suggesting that they are DPs throughout.

(4) $[_{DP}$ Yóój se’ë $t_j]_i$ yá kàku t_i ? (5) Yóó*i* nà kàku $[_{DP}$ {iin / míí} se’ë t_i]?
 who child 3SG born.COMP who 3PL born.COMP one DEF child
 ‘Whose child (specific) was born?’ ‘Who had a (non-specific) child born?’
 ‘Whose child (specific) was born?’

(6) (PEDRO) kàku (*Pedro) $[_{DP}$ iin se’ë (\checkmark Pedro)] nuù ntova (*Pedro)
 P. born.COMP P. one child P. town Oaxaca P.
 ‘Pedro had a child born in Oaxaca City.’ (SMPM)

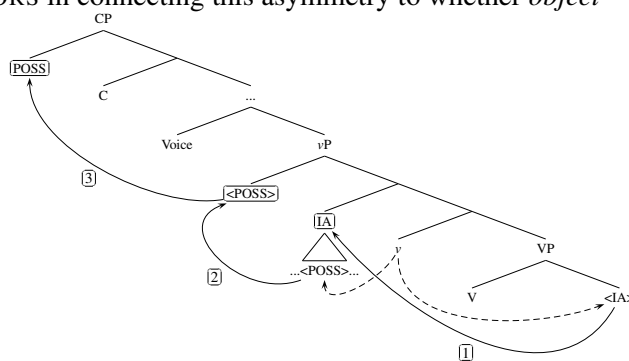
Another difference is that, in Tseltalan, possessor \bar{A} -extraction out of transitive objects is not possible without the addition of applicative morphology, (7). Per A&P, the higher subject DP acts as an intervener, since T° raises the subject to spec-TP instead; however, an ApplP creates another rightward A-position that a wh-possessor can A-move to (spec-AppIP) before subsequently \bar{A} -extracting to spec-CP. Unlike Tseltalan, however, SMPM allows possessor \bar{A} -subextraction out of transitive objects without any additional verbal morphology, (8), and we are unaware of any comparable applicative constructions. Thus, in SMPM, subject DPs do not serve as interveners for object-internal possessor DPs, because there is no A-position for possessor raising.

(7) Mach'a_i la a-man*(-bey) tal [_{POSSP} s-lok'ombail t_i] t_i?
 who CP A2-buy-APPL DIR A3-representation
 'Who did you buy a picture of?' (Tenango Tseltal)

(8) Yóó; xix=ún [_{DP} ntsiàjyí và'a ñà'à t_i]?
 who eat.COMPL=2SG broth good POSS
 'Whose mole did you eat?' (SMPM)

Possessor \bar{A} -subextraction in SMPM thus displays properties not seen in Tseltalan: (i) it takes place without an intermediate A-movement step to spec-TP or spec-AppIP, and (ii) it is not constrained by the specificity or size of the possessive phrase. (We have focused on movement out of internal arguments here; movement possibilities out of external arguments and PPs in Tseltalan vs. SMPM will be discussed in the full talk.) Therefore, though Tseltalan and SMPM display surface-similar empirical profiles of possessor \bar{A} -extraction, the above differences indicate that distinct analyses are needed.

3. Analysis of SMPM; comparison with A&P. Although SMPM permits true \bar{A} -subextraction out of possessive DPs, this is only possible out of internal arguments (IAs), not external arguments (EAs) (AUTHORS to appear). We moreover follow AUTHORS in connecting this asymmetry to whether *object shift* (A-movement to spec-*vP*) takes place. All IAs undergo object shift; this is independently motivated as VP-S-O word order is derived by remnant VP movement (Massam 2001). A-movement of the IA DP [1], initiated by v° , 'unlocks' the DP (a phase), enabling subsequent successive-cyclic \bar{A} -subextraction of the possessor to spec-*vP* [2] and then spec-CP [3] (Rackowski & Richards 2005). In contrast, EAs do not undergo object shift (we assume they are generated outside *vP*, in spec-VoiceP), so they remain opaque (*pace* Little 2020, who argues that object shift bleeds subextraction in Ch'ol).



This analysis is not extendable to Tseltalan, as the heads implicated in A-movement in those languages are not phase heads (T° , $AppI^\circ$) and are thus not expected to 'unlock' other phases. Moreover, there is an inverse correlation between the XPs that A-move and the XPs that allow extraction: in Tseltalan, non-specific PossPs *don't* move to spec-TP, yet possessors *do* raise out of them, the opposite of what we would expect if movement unlocked an otherwise opaque domain. Consequently, we conclude that there are at least *two distinct pathways to possessor \bar{A} -extraction* even within the same linguistic area.

4. Implications. On the surface, Tseltalan and SMPM display similar empirical profiles. However, a closer investigation reveals that SMPM (but not Tseltalan) permits possessor \bar{A} -extraction out of specific DPs, and Tseltalan (but not SMPM) displays an independently motivated possessor raising operation. Nonetheless, we highlight here some commonalities that suggest a deeper connection. For both languages, certain domains are opaque for \bar{A} -movement (DPs in SMPM vs. all nominals in Tseltalan), with this opacity obviated by some step of A-movement (phase unlocking vs. possessor raising). Moreover, the A-movement operations employed are also used in the general derivation of verb-initiality: VOS order in Tseltalan involves rightward movement of subjects, while VSO order in SMPM involves object shift. Lastly, PPWI (possessor \bar{A} -movement to spec-DP) is generally independently available in both languages, but appears to be orthogonal to possessor \bar{A} -subextraction, which is more constrained.