## Passives and statives in Marshallese: Evidence for two types of "by phrases" Heather Willson Brigham Young University

One of the defining properties of Marshallese (Austronesian, Oceanic, Micronesian) passive sentences is that they allow one of two prepositions in what corresponds to English by phrases. These prepositions are  $ipp\bar{a}$ - 'with' (1) and in 'of' (2). Although the semantics of these two prepositions appears to be identical in passives (i.e. both introduce an agent phrase), there are syntactic differences between sentences containing these prepositions. First, two strings containing  $ipp\bar{a}$ - and the agent may be coordinated (3), whereas two strings containing in and the agent may not (4). Second, while  $ipp\bar{a}$ - and the agent may be moved to a sentence initial position (5), in and the agent may not (6). Third, sentential elements, such as a prepositional phrase, may intervene between  $ipp\bar{a}$ - and the verb (7) but not in and the verb (8). Based on these facts, Willson (2008) concludes that  $ipp\bar{a}$ - and the agent phrase are a constituent, whereas in and the agent phrase are not.

This conclusion presents a problem for the traditional analysis of passives as proposed by Chomsky (1982) and Baker, Johnson and Roberts (1988) because the traditional analysis offers no explanation as to why one preposition+agent string is a constituent but another preposition+agent string is not. If the traditional analysis is adopted for Marshallese, both *in* and *ippā*- would be heads of prepositional phrases that take agent phrases as a complements. These prepositional phrases would be adjoined to the verb phrase, as shown in (9). Crucially, *in* and the agent phrase as well as *ippā*- and the agent phrase should behave like constituents. However (3-8) show this is not the case.

In order to explain the differences in the syntax of these strings, I propose an analysis of passives reminiscent of Collins' (2005) smuggling approach to English passives. This analysis makes use of three ideas proposed by Collins: 1) in – like the English by – is the head of a Voice projection, 2) the agent DP is merged as the specifier of vP and receives an agent theta role from the verb, and 3) the VP raises to spec VoiceP. While Collins proposes subsequent movement of VP from spec VoiceP – a proposal that explains why the English by and the agent phrase are a constituent – I argue that the Marshallese VP remains in spec VoiceP but that the Marshallese verb moves and left adjoins to the Voice head, as shown in (10).

This modified smuggling analysis can also account for passive sentences that contain  $ipp\bar{a}$ -phrases if we adopt an idea proposed by Watanabe (1993) and Mahajan (1994). This idea claims that a PP (rather than a DP) may be merged as the specifier of vP in passives. In Marshallese, this means that  $ipp\bar{a}$ - and the agent are merged in this position. The absence of in in sentences containing  $ipp\bar{a}$ -can therefore be explained under the assumption that these sentences have a non-overt Voice head requiring a PP to be merged as spec vP (11). In addition to explaining the constituency of passive sentences, this analysis also explains why  $ipp\bar{a}$ - phrases may appear in Marshallese stative sentences, whereas in+agent strings may not. As a Voice head, in is associated with the passive voice and is therefore only possible in passive sentences. However  $ipp\bar{a}$ - is the head of a prepositional phrase and may be left adjoined to the verb phrase in stative sentences or merged as spec vP in passive ones.

This analysis leads to a typology of passives that allows for three types of languages. The first type employs an English-like strategy with respect to "by phrases," merging the DP agent in spec vP and 'by' as a Voice head. The second employs a Japanese and Hindi-like strategy and merges a PP headed by 'by' in spec vP. The third type, the Marshallese type, employs both the English-like and the Japanese and Hindi-like strategies and has two words corresponding to the English by: one that is a Voice head and one that is the head of a prepositional phrase. Therefore, this third type of language merges a DP in spec vP when there is an overt Voice head but a PP when there is a null Voice head.

- (1) Jaki ko r=ar lem~lem ippā-n kōrā ro. mat the.PL.NH 3PL.AGR=PAST fold~INTR with-3SG woman the.PL.H 'The mats were folded by the women.'
- (2) Jaki ko r=ar lem~lem in kōrā ro. mat the.pl.nh 3PL.AGR=PAST fold~INTR of woman the.PL.H 'The mats were folded by the women.'
- (3) Jaki ko r=ar lem~lem [ippā-n kōrā ro] im [ippā-n leddik mat the.PL.NH 3PL.AGR=PAST fold~INTR with-3SG woman the.PL.H and with-3SG girl ro]. the.PL.H

  'The mats were folded by the women and by the girls.'
- (4) \*Jaki ko r=ar lem~lem [in kōrā ro] im [in leddik ro]. mat the.PL.NH 3PL.AGR=PAST fold~INTR of woman the.PL.H and of girl the.PL.H 'The mats were folded by the women and by the girls.'
- (5) Ippā-n kōrā ro, jaki ko r=ar lem~lem. with-3sg woman the.PL.H mat the.PL.NH 3PL.AGR=PAST fold~INTR 'By the women, the mats were folded.'
- (6) \*In kōrā ro, jaki ko r=ar lem~lem. of woman the.PL.H mat the.PL.NH 3PL.AGR=PAST fold~INTR 'By the women, the mats were folded.'
- (7) Jaki ko r=ar lem~lem ilowan mweo ippā-n kōrā ro. mat the.PL.NH 3PL.AGR=PAST fold~INTR inside.of the.house with-3sg woman the.PL.H 'The mats were folded in the house by the women.'
- (7) Jaki ko r=ar lem~lem ilowan mweo in korā ro. mat the.PL.NH 3PL.AGR=PAST fold~INTR inside.of the.house of woman the.PL.H 'The mats were folded in the house by the women.'
- (9) ...  $[_{vP} [_{vP} V+v [_{VP} t_V subject]] [_{PP} in/ippān agent]]$
- (10) ... [ $_{\text{VoiceP}}$  [ $_{\text{VP}}$  t $_{\text{V}}$  subject] V+in... [ $_{\text{VP}}$  agent t $_{\text{VP}}$ ]]
- (11) ... [voiceP [vP tv subject] V+ $\emptyset$ ...[vP [PP ipp $\bar{a}$  agent] tvP]]

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