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THE INTERPRETATION AND TRANSITIVITY OF *-UN/-AN* IN TRUKU

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The analysis of the verbal suffixes *-un* and *-an* in Seejiq morphology is controversial. Two distinctive approaches are found in the previous studies. In the first, they are analyzed as “focus” markers and as separate morphemes. In the second, they are separate “voice” morphemes, under the cover term Goal voice morpheme. This paper presents an alternative analysis and shows that neither the focus- nor the voice-based approach successfully clarifies the difference between these two morphemes; careful attention to the use of *-un* and *-an* reveals that it is problematic to conclude that *-un* is patient focus, whereas *-an* is locative focus. In addition, the previous analyses are insufficient in terms of interpreting distribution. I (i) agree that *-un* and *-an* are separate voice morphemes under the cover term Goal voice; (ii) propose that their difference is not strictly one of voice/focus, but of the degree of transitivity in the sense of Hopper and Thompson 1980; and (iii) conclude that *-un* has high transitivity and *-an* low transitivity.

1. INTRODUCTION. Like some Austronesian languages, Truku, one of the dialects of the Seejiq language spoken indigenously in central to eastern Taiwan, has a Philippine-type of “focus” construction, in which the verbal morphology encodes the thematic role of a syntactically prominent element. Typically in Seejiq languages, the set of verbal morphemes includes *m-*, *-un*, *-an*, and *s-*, which were considered to be agent focus (AF), patient focus (PF), locative focus (LF), and referential focus (RF), respectively, by Holmer (1996) and Chang (2000).¹ While the analysis of *m-* and *s-* morphology is not controversial, careful attention to the use of *-un* and *-an* reveals that it is actually inaccurate to conclude that *-un* is PF whereas *-an* is LF. There is an overlapping distribution in the use of these two verbal suffixes. In this paper, I argue that these are separate voice morphemes, but allomorphs of a single Goal voice morpheme; they both represent Goal voice and the difference is the degree of transitivity; I agree with Tsukida (2005), who treats them as allomorphs of a single Goal voice morpheme and under the cover term GV (Goal voice) (see section 3.2). However, the above-mentioned focus-/voice-based approach fails to capture the difference between *-un* and *-an*, but careful examination of these morphemes in terms of the degree of transitivity (in Hopper and Thompson’s sense) helps clarify that difference (Hopper and Thompson 1980:252). Based on some morphosyntactic and semantic criteria that the Truku data exhibit, I conclude that *-un* marks high transitivity and *-an* low transitivity (see section 4.1). In section 2, I begin with a brief introduction to the linguistic background of Truku, including dialectal variation, verbal constructions, and the use of voice and tense/aspect. In section 3, I summarize and evaluate previous analyses. Finally, I propose and discuss an alternative analysis of the distribution of *-un* and *-an* based on morphosyntactic and semantic criteria of transitivity.

¹ While Chang (2000) puts *s-* under the cover term RF to include instrument focus (IF) and beneficiary focus (BF), Holmer (1996) terms it IF.

2. LINGUISTIC BACKGROUND. The population of Truku is around 24,000, but the number of speakers is unknown.² According to Krauss’s classification for degree of language endangerment (2007:1–8), Truku is categorized as a definitely endangered language, which is spoken only by the parental generation and above.

2.1 DIALECTAL VARIATION. Together with the Teuda and Tkdaya dialects, Truku is one of the three dialects of Seejiq, an Austronesian language spoken northeast of Puli in Central Taiwan, past Wushe and the valleys to the east and northeast, and across the Central Mountain Range to Truku Gorge and the Pacific coast (Holmer 1996:9). Seejiq is one of the two members of the Atayalic subgroup; the other one, Taial, comprises Squliq and Ci’uli dialects. The differences among the three dialects of Seejiq are mainly in phonology and lexicon; there are slight differences in syntax (Tsukida 2005:291). The verbal constructions and unresolved problems are illustrated in section 2.2, and the occurrence of the verbal morphology according to voice and tense/aspect is introduced in section 2.3.

2.2 VERBAL CONSTRUCTIONS. Truku morphology tends to be agglutinating, and its word order is VOS. One word is usually composed of one lexical morpheme and some optional affixations such as prefixes, infixes, suffixes, or circumfixes. The constituent order is mostly predicate-initial and subject-final. Predicates can be adjectives, NPs, or verbs, as in (1) to (3) respectively. When the subject is overtly expressed, it is preceded by the nominative marker *ka*.

- (1) malu bi ka emptgsa gaga.
 good very NOM teacher that
 ‘That teacher is very good.’
- (2) emptgsa ka yaku.
 teacher NOM 1SG
 ‘I am a teacher.’
- (3) tgsa-un ku na ka emptgsa.
 teach-GV1 1SG SG NOM teacher
 ‘The teacher will teach me.’

2.2.1 TRADITIONAL VIEW OF VERBAL CONSTRUCTION. Syntactically, verbs in Truku behave in a manner typical of Philippine-type and Formosan languages. In Philippine-type languages, the feature of a verbal predicate determines the semantic relationship between a predicate verb and the syntactically prominent NP (Schachter and Otnes 1972:69).³ The examples in (4) are in Tagalog.⁴ When an agent is selected as the prominent NP, the verb is marked with the agent voice, *nag-*, as in (4a). When a theme is selected as the prominent NP, the verb is marked with *-in-*, the theme voice (TV), as in (4b).

² The reference is from the Council of Indigenous Peoples in Taiwan.
http://www.apc.gov.tw/main/docDetail/detail_ethnic.jsp?cateID=A000205&linkParent=151&linkSelf=151&link

³ The syntactically prominent NP is referred as “topic” in Schachter and Otnes 1972:69.

⁴ Data are provided by Emerson Odango, a speaker of Tagalog (pers. comm. 2009).

(4)a. nag-hi-hiwa ng isda si Pedro sa bahay.
 AV-cut GEN fish NOM Pedro OBL house
 ‘Pedro cuts fish at home.’

b. h-in-ihawa ni Pedro ang isda sa bahay
 cut-TV GEN Pedro NOM fish OBL house
 ‘Pedro cuts fish at home (Lit: fish is cut by Pedro at home).’

In Truku, the verbal affix identifies the semantic role of the nominal argument, which is accompanied by *ka* in the clause-final position. The example sentences illustrate the use of four affixes: (i) when an agent is selected as the prominent *ka*-marked NP, the verb is marked with *(-)m-*, AV as in (5); (ii) when a theme is selected, the verb is marked with *-un* (TV), as in (6); (iii) when a location is selected, the verb is marked with *-an*, the locative voice (LV), as in (7); and (iv) when an instrument or beneficiary is selected, the verb is marked with *s-*, the referential voice (RV), including instrument voice (IV) as in (8a) and beneficiary voice (BV), as in (8b).⁵

AV

(5) k-**m**-rut qsurux sapah ka **Lowking**.
 cut-AV fish house NOM Lowking
 ‘Lowking cuts fish at home.’

TV

(6) krt-**un** Lowking sapah ka **qsurux**.
 cut-TV Lowking house NOM fish
 ‘Fish is cut by Lowking at home.’

LV

(7) krt-**an** qsurux Lowking ka **sapah**.
 cut-LV fish Lowking NOM house
 ‘Home is the place where Lowking cuts fish.’

RV

(8)a. s-krut qsurux nii ka **yayu gaga**
 RV-cut fish this NOM knife that
 ‘That knife is used to cut the fish.’

b. s-krut qsurux Lowking ka **baki**.
 RV-cut fish Lowking NOM grandfather
 ‘Grandfather is the one that Lowking cuts the fish for.’

Traditionally, the verbal affixes in Philippine-type languages have been interpreted mostly as voice (Himmelman 2002; Tsukida 2005) or focus (Holmer 1996; Chang 2000). However, based on the data in (5) to (8) above, I follow Himmelman and Tsukida, who consider these affixes as “voice-marking” affixes because the syntactically prominent NP triggers agreement on the verb and the verb form reflects its semantic role. Himmelman (2002:11) claims that these voice constructions are essen-

⁵ RV covers both instrument voice (IV) and beneficiary voice (BV), which are distinguished in some languages.

tially the same thing as the active/passive alternation in English, and further states that “all of these alternations involve realignment between syntactic pivots and semantic roles.” However, viewing the verbal affixes solely as “voice-marking” affixes cannot fully clarify the differences between these two morphemes *-un* and *-an*, since their use and distribution are overlapping and involved in a continuum of transitivity (see section 4).

2.2.2 UNRESOLVED PROBLEMS. Among the four voices mentioned in (5) to (8), the distributions of (-)*m*- and *s*- are relatively regular. The verb is marked with (-)*m*- when an agent is selected as the prominent *ka*-marked NP. The verb is marked with *s*- when an instrument or beneficiary is the prominent *ka*-marked NP. However, when the distributions of *-un* and *-an* are closely examined, it is problematic to conclude that the verb is marked with *-un* when the prominent *ka*-marked NP is selected as a theme, whereas the verb is marked with *-an* if the prominent *ka*-marked NP is a location. For instance, when the theme is selected as the *ka*-NP, *-an* rather than *-un* marks the verb *sipaq* ‘hit’, as in (9). In contrast, *-un* rather than *-an* marks the verb *taqi* ‘sleep’, when the prominent *ka*-marked NP is a location, as in (10).

(9) p-n-aq-an/*un⁶ Lowking ka hl-huling⁷ ga da.
hit-PRF-an Lowking NOM RDP-dog that already
‘Those dogs have been hit by Lowking.’

(10) tqi-un/*an mu ka srakaw nii.
sleep-un 1SG.POSS NOM bed this
‘I will sleep on this bed.’

I will discuss these unresolved problems of the previous analyses further in section 3. In the following section, the use of voice and tense/aspect is introduced.

2.3 VOICE AND TENSE/ASPECT. The four verbal affixes can be categorized into three voices: (i) (-)*m*-, agent voice (AV); (ii) *-un* and *-an*, goal voice (GV); and (iii) *s*- referential voice (RV).⁸ These voices can co-occur with five morphosyntactic tense/aspect categories—that is, present, perfect, past, progressive, and future, as shown in table 1.

⁶ The first syllable *si-* in the verb *sipaq* ‘hit’ is eliminated when it is attached to the suffix *-an*.

⁷ The first three phonemes *hul-* in the singular noun *huling* ‘dog’ are reduplicated to form a plural noun; then the vowel /u/ in the reduplicated part is weakened to a schwa. A schwa is usually not written between consonants in Truku orthography (Nowmaw and Pisaw 2007:28).

⁸ GV is a cover term for *-un* and *-an*; *-un* is called GV1, whereas *-an* is GV2. Their use and distribution are discussed in section 4.1.

TABLE 1. Voice and tense/aspect paradigm

	AV	GV		RV
PRS	(-)m-	<i>-un</i> (GV1)	<i>-an</i> (GV2)	s-
PRF	m- <i>n</i>	<i>n-an</i>	<i>n-an</i>	s-(<i>n</i>)
PST	<i>wada</i> -m	<i>wada -un</i>	<i>wada -an</i>	<i>wada</i> s-
PROG	<i>gaga</i> -m	<i>gaga -un</i>	<i>gaga -an</i>	<i>gaga</i> s-
FUT	<i>e-m-p</i>	<i>-un</i>	<i>-un</i>	s-

A set of examples can illustrate in the AV paradigm. No marker is needed to indicate the present tense, as in (11a); *-n-* is the marker for the perfect aspect, as in (11b); *wada* is a preverbal auxiliary that indicates the past tense, as in (11c); *gaga* is also a preverbal auxiliary referring to the progressive marker as in (11d); *-p* is the marker to express the future tense in the AV paradigm as in (11e). After *-p-* is added following the AV marker *(-)m-*, a schwa /ə/—written as *e* in Truku orthography—is inserted before *-mp-* (Nowmaw and Pisaw 2007:29).⁹

- (11)a. m-taqi ka laqi.
 AV-sleep NOM child
 ‘The child sleeps.’
- b. m-n-taqi ka laqi da.
 AV-PRF-sleep NOM child already
 ‘The child has already slept.’
- c. wada m-taqi ka laqi.
 PST AV-sleep NOM child
 ‘The child slept.’
- d. gaga m-taqi ka laqi.
 PROG AV-sleep NOM child
 ‘The child is sleeping.’
- e. e-m-p-taqi ka laqi.
 INS-AV-FUT-sleep NOM child
 ‘The child will sleep.’

3. PREVIOUS ANALYSES OF SEEJIQ FOCUS: SUMMARY AND EVALUATION. Three Austronesianists who have analyzed Seejiq verbal morphemes are Holmer (1996), Chang (2000), and Tsukida (2005). Holmer and Chang deal with the Tkdaya dialect, whereas Tsukida analyzes data from the Truku dialect. Though the three linguists have different approaches, they all treat *m-* and *s-* in a similar fashion. Both Holmer and Chang treat these affixes as “focus” morphemes and consider *m-* as AF and *s-* as RF

⁹ After the schwa is inserted before *-mp-*, *-p-* is elided and becomes *-b-* if the initial sound of the word that it is attached to is /b/. For example, *emp-* becomes *emb-* before the verb *bgay* ‘give’, as in *embgay* ‘will give’, or *brig* ‘buy’, as in *embrig* ‘will buy’.

including IF and BF. Tsukida views *m-* as actor voice (AV) and *s-* as conveyance voice (CV). However, they have different analyses of *-un* and *-an*, as illustrated in 3.1 and 3.2.

3.1 HOLMER AND CHANG. Both Holmer and Chang consider *-un* and *-an* as separate morphemes, *-un* (TF) and *-an* (LF), as shown in table 2.

TABLE 2. Focus and tense paradigm.

	TENSE	TF	LF
(Holmer 1996:44)	PRES	<i>-un</i>	<i>-an</i>
	PERF	<i>-n-</i>	<i>-n-an</i>
	FUT	<i>C-un</i>	<i>C-an</i>
(Chang 2000:93)	PST	<i>-an</i>	<i>-an</i>
	FUT	<i>-un</i>	<i>-un</i>

Holmer (1996:135) claims that the most important difference in the contemporary use of TF *-un* and LF *-an* is one of aspect: *-un* is used to indicate perfective, as in (12a), whereas *-an* is imperfective, as in (12b).

(12) *-un* [TF, +PRFV] and *-an* [LF, -PRFV] (data from Tkdaya dialect, Holmer 1996:135)

a. wada mu mah-un sino nii.¹⁰
 PRET 1SG drink-TF wine this
 ‘I drank (up) this wine.’¹¹

b. wada mu mah-an sino nii.
 PRET 1SG drink-LF wine this
 ‘I drank (some of) this wine.’

Similar to Holmer, Chang also views these morphemes as separate items and points out that the main difference between the use of these two is one of tense or aspect: TF *-un* is used to indicate future tense, as in (13a), whereas LF *-an* implies past tense, as in (13b).

(13) *-un* [TF, -PST] and *-an* [LF, +PST] (data from Tkdaya dialect, Chang 2000:87)

a. ruhug-un na tama (ka) sapah-mu¹²
 lock-TF 3SG.POSS father NOM house-1SG.POSS
 ‘Father will lock my house.’

¹⁰ *ka* before the NP ‘this wine’ can be omitted in Tkdaya dialect.

¹¹ The difference could also be seen as affectedness of the object. There is an inevitable overlap between the completion of event (e.g., drinking of a bottle of wine) and the affectedness of the object (e.g., the bottle is empty vs. half full).

¹² It is not typical that the verb is marked with *-un* to indicate lower transitivity here, since Hopper and Thompson predict that high transitivity correlates with perfectivity and the past. Future investigation is needed in terms of the property and atypical use of the suffix *-un*.

b. ruhug-an na tama (ka) sapah-mu
 lock-LF 3SG.POSS father NOM house-1SG.POSS
 ‘Father locked my house.’

3.2 TSUKIDA. Unlike Holmer and Chang, who analyze *-un* and *-an* as “focus” affixes and separate morphemes, Tsukida (2005:299) claims that Seejiq verbs always occur in one of three “voices” (Agent voice [AV], Goal voice [GV], or Conveyance voice [CV]), which in turn are always inflected for aspect/mood.¹³ She states that “... for GV two neutral forms are distinguished, one consisting of the stem plus suffix *-un* (GV1) and one of the stem with suffix *-an* (GV2).” There are four basic aspect/mood categories: neutral, perfect, non-finite, and hortative, as shown in table 3.

TABLE 3. Voice and aspect/mood paradigm.

	aspect/mood	GV1	GV2
(Tsukida 2005:314)	neutral	<i>-un</i>	<i>-an</i>
	perfect	<i>-en-an</i>	
	future	—	
	non-finite	i	
	hortative	ay	

She further states that a number of parameters affect the distribution of *-un* and *-an*, including: (i) the affectedness of object, in which *-un* is used for the affected object as in (14); (ii) the affectedness of subject, in which *-an* is used for the non-affected subject including location, goal, and recipient as in (15); (iii) aspect/mood, where *-un* is used in future expressions as in (16); and (iv) extension of the predicate, where *-un* appears in a complex sentence, in which a preverbal auxiliary like *wada* ‘psst’ is included in a predicate, as in (17a), and *-an* appears in a simple sentence where no element precedes the verbal predicate, as in (17b).

Distributions of *-un* and *-an* (data in (14) to (17) are from Truku dialect, Tsukida 2005:318–19):

Affectedness of object:

(14) wada=mu hepuy-un/*an ka seqemu.
 PST=1SG.GEN cook-GV1 NOM corn
 ‘I cooked (all) the corn.’

Affectedness of subject:

(15) hpuy-an/*un damat ka hini.
 cook-GV2 vegetable NOM here
 ‘The [place] is where vegetables are cooked.’

¹³ If the semantic role of the *ka*-marked NP is the thing conveyed, the verb is in Conveyance voice.

Aspect/mood:

- (16) tepaq-un/*an laqi ka yayung hini.
 swim-GV1 child NOM river PRX.LOC
 ‘The/A child(-ren) will swim in this river.’

Extension of the predicate:

- (17)a. wada seqet-un/*an laqi ka waray.
 PST cut-GV1 child NOM thread
 ‘The/A child cut the thread.’
 b. seqet-an/*un laqi kededyax ka waray.
 cut-GV2 child every day NOM thread
 ‘The/A child cuts the thread every day.’

3.3 EVALUATION OF PREVIOUS ANALYSES. Two distinctive approaches are found in the previous analyses of Seejiq *-un* and *-an*. In the first, they are “focus” markers and separate morphemes. In the second, they are separate “voice” morphemes, but allomorphs of a single Goal voice morpheme. I consider these morphemes as voice morphemes rather than focus morphemes, following Himmelmann (2002:11–15 and 2005:110–81), Ross and Teng (2005:739–81), and Tsukida (2005:313–25). My stance is based on two facts of Truku, in which (a) *ka*-marked NP is syntactically prominent in terms of relativization, raising, floating quantifier, and coordination reduction; and (b) pragmatic focus is expressed by means of other syntactic devices, such as topicalization and fronting the question words. (18) below illustrates that relativization is restricted to *ka*-marked NP. In (18a), the verb is marked with *-m-*, and the agent Lowking is selected as the prominent *ka*-NP. While the *ka*-marked NP *Lowking* can be relativized, as in (18b), the relativization of the theme argument *qsurux* ‘fish’ is prohibited, as shown in (18c). In order to relativize the theme argument, the verb *krut* ‘cut’ in the relative clause must be marked with *-an* (GV2) instead of *-m-* (AV), as in (18d).

- (18)a. k-m-n-rut qsurux shiga ka Lowking.
 cut-AV-PRF fish yesterday NOM Lowking
 ‘Lowking cut fish yesterday.’
 b. Lowking [k-m-n-rut qsurux shiga o] biyax bi balay.
 Lowking cut-AV-PRF fish yesterday PAUS strong very very
 ‘Lowking who has cut the fish is very strong.’
 c. *qsurux [k-m-n-rut Lowking shiga o] biyax bi balay.
 fish cut-AV-PRF Lowking yesterday PAUS strong very very
 ‘The fish that has cut Lowking is very strong.’
 d. qsurux [k-n-rt-an Lowking shiga o] malu bi uqun
 fish cut-PRF-GV2 Lowking yesterday PAUS good very taste
 ‘The fish that has been cut by Lowking is very tasty.’

Neither the “voice” nor the “focus” approach is fully satisfactory, however. I evaluate these two approaches in terms of the type of morpheme and factors of distribution.

3.3.1 SEPARATE OR SINGLE MORPHEME. We cannot simply categorize the suffixes as *-un* [TF] and *-an* [LF] as claimed by Holmer, as in (12) above, and Chang, as in (13) above. In addition to exam-

ples (9) and (10), the examples here also show that *-un* can be used as G/LF, as in (19a); while *-an* can be used as TF, as in (19b). Thus, it is not accurate merely to call *-un* TF and *-an* LF.

- (19)a. tpaq-un seejiq ka yayung nii.
 swim-un people NOM river this
 ‘The river is for people to swim.’
- b. sbt-an tama mu kdjiyax ka spriq nii.
 cut-an father 1SG.POSS every day NOM grass this
 ‘My father cuts the grass every day (Lit: the grass is cut by my father every day).’

3.3.2 FACTORS OF DISTRIBUTION. Aside from the fact that *-un* and *-an* cannot simply be differentiated from each other in terms of either aspect, as claimed by Holmer, or tense, as claimed by Chang, the previous analysis is also insufficient in terms of distribution. Specifically, it is problematic to conclude that the extension of predicate can affect the distribution of these two morphemes, as claimed by Tsukida and seen in (17). The distributional factors are reexamined in this section.

3.3.2.1 *-un* [+PRFV] and *-an* [-PRFV]. The difference between *-un* and *-an* does not reside simply in aspect as claimed by Holmer. With the help of sentential context, *-un* and *-an* give different interpretations in terms of perfectiveness. *-un* itself has a feature [non-PRF], so it can also express the imperfectiveness of an action, as in (20a). However, *-an* can be compatible and co-occur with *-n-* [PRF] to express the perfectiveness of the action, as shown in (20b).

- (20)a. sqma-un/*an mu ka sudu ga, ini mu qjiyi na.
 burn-un 1SG.POSS NOM trash that NEG 1SG.POSS finish yet
 ‘I still need to burn that trash, I have not finished it yet.’
- b. wada mu s-n-qma-an/*un kana ka sudu da.
 PST 1SG.POSS burn-PRF-an all NOM trash already
 ‘All trash has been burnt by me.’

3.3.2.2 *-un* [-PST] and *-an* [+PST]. Nor is the distinction between *-un* and *-an* is merely in the use of tense, as claimed by Chang. TF (*-un*) can also appear in a past event, as in (21), and LF (*-an*) can sometimes be used to express a non-past event as well, as in (22).

- (21) wada krt-un shiga ka qsurux.
 already cut-un yesterday NOM fish
 ‘The fish was cut yesterday.’
- (22) gaga krt-an ka qsurux.¹⁴
 PROG cut-an NOM fish
 ‘The fish is being cut.’

3.3.2.3 EXTENSION OF PREDICATE. It is problematic to conclude that *-un* appears in a complex sentence, which contains an extended predicate, as in (17a), whereas *-an* appears in simple predicate, as in

¹⁴ *-an* is used here to express the imperfective or less affected theme.

(17b). As the following data show, a verb can also be marked with *-an* when it appears as a “complex” predicate in a past complete event, as in (23a); *-un* can be used in a simple predicate, as in (23b).

- (23)a. wada d-n-hq-an Lowking ka Karingku.
 already arrive-PRF-an Lowking NOM Karingku
 ‘Karingku was the place Lowking had already arrived at.’
- b. d-hq-un Lowking saman ka Karingku.
 arrive-un Lowking tomorrow NOM Karingku
 ‘Karingku will be the place Lowking will arrive at.’

4. PROPOSED ANALYSIS. As mentioned above, I consider *-un* and *-an* to reflect voice morphology rather than focus, mainly because of the syntactic prominence of the *ka*-marked NP. Nevertheless, their difference is not strictly of voice/focus, but of transitivity in the sense of Hopper and Thompson 1980. The authors maintain that transitivity is a continuum and is defined by semantic as well as syntactic factors, including PARTICIPANT, KINESIS, ASPECT, PUNCTUALITY, VOLITIONALITY, AFFIRMATION, MODE, AGENCY, AFFECTNESS OF OBJECT, and INDIVIDUATION OF OBJECT, as in table 4. In this section, I show that *-un* has high transitivity and *-an* low transitivity, based on six factors that are illustrated in the following section.

TABLE 4. Scale of transitivity

	HIGH	LOW
PARTICIPANTS	2 or more participants, agent and object	1 participant
KINESIS	action	non-action
ASPECT	telic	atelic
PUNCTUALITY	punctual	non-punctual
VOLITIONALITY	volitional	non-volitional
AFFIRMATION	affirmative	negative
MODE	realis	irrealis
AGENCY	agent high in potency	agent low in potency
AFFECTEDNESS OF OBJECT	object totally affected	object not affected
INDIVIDUATION OF OBJECT	object highly individuated	object non-individuated

4.1 DISTRIBUTION. As mentioned above, Tsukida (2005:318–20) views *-un* and *-an* as voice morphology and observes some factors that affect their distributions, such as *affectedness of subject affectedness of object*, and *mood and aspect*, as well as *extension of predicate*. Here I consider the difference between *-un* and *-an* as not being one of either voice or focus, but one of degree of transitivity. Specifically, *-un* is more transitive than *-an* because when *-un* is used (i) there are two participants involved in an event, (ii) the event or action is complete, (iii) the action is telic, (iv) *ka* NP is an affected theme, (v) realis events take *-un*, and (vi) participants high in agency take *-un*. In addition, *ka* NP can be either theme or location with both *-un* and *-an*, as in (23) and (24). These six factors are illustrated in the following examples.

4.1.1 PARTICIPANTS. A *ka* NP can be either theme or location with both *-un* and *-an*. When there are two participants (agent and patient/theme) involved in the present tense, *-un* is used, as in (24). However, when there is only one participant (agent but no patient/theme) involved, meaning no transfer at all is taking place, *-an* is used, as in (25).¹⁵

(24) paq-un mu ka huling nii
hit-GV1 1SG.POSS NOM dog this
'The dog is hit by me.'

(25) sa-an mu ka Karingku.
go-GV2 1SG.POSS NOM Karingku
'Karingku is the place I go.'

4.1.2 ASPECT. Without the help of TAM, *-un* and *-an* give different aspect interpretations: *-un* is used in the present and future tense, whereas *-an* is used in the past tense. On one hand, *-un* itself has a feature [NON-PRF], so it is compatible with the \emptyset marker in the present tense, as in (26a), or the future adverb *hici* 'later', as in (26b). However, it is incompatible with *-n-*, which is [PRF], as in (26c).

(26) a. krt-un Lowking sapah ka qsurux.
cut-GV1 Lowking house NOM fish
'Fish is cut by Lowking at home.'

b. krt-un Lowking sapah hici ka qsurux.
cut-GV¹⁶ Lowking house later NOM fish
'Fish will be cut by Lowking at home later.'

*c. k-n-rt-un Lowking sapah ka qsurux.
cut-PRF-GV1 Lowking house NOM fish
'Fish has been cut by Lowking at home.'

On the other hand, *-an* itself has a feature [PRF], so it is consistent with *-n-* [PRF] and can therefore co-occur with it, as shown in (26d).

d. k-n-rt-an Lowking sapah ka qsurux.
cut-PRF-GV2 Lowking house NOM fish
'Fish has been cut by Lowking at home.'

4.1.3 TELICITY. An action viewed from its end point (i.e., a telic action) is more transitive in that it is more effectively transferred to a patient than one not provided with such an end point (Hopper and Thompson 1980:252). When the activity is viewed as completed and the transferral is carried out in its entirety, *-un* is used, as in (27a); when the action is atelic and the transferral is partially carried out, *-an* is usually used, as in (27b).

(27)a. wada mu krt-un ka qsurux (da).
already 1SG.POSS cut-GV1 NOM fish already
'The fish has been cut by me.'

¹⁵ A participant refers to the agent; there is no object involved, so location is not considered as a participant (Hopper and Thompson 1980:252).

¹⁶ GV is a cover term or neutral form of *-un* (GV1) and *-an* (GV2).

- b. *nii mu krt-an ka qsurux (na).*
 PROG 1SG.POSS cut-GV2 NOM fish still
 ‘The fish is (still) being cut by me.’

4.1.4 AFFECTEDNESS OF THEME. How completely the theme is affected can be observed in the degree to which an action is transferred to a theme; thus *-un* is seen to be more transitive, as it is used with an affected theme, as in (28a) and (29a), while *-an* is used with a less affected theme, as in (28b) and (29b).

- (28)a. *wada mu uq-un da.* (affected theme)
 already 1SG.POSS eat-GV1 already
 ‘(It) has been eaten (all) up by me.’

- b. *wada mu uq-an da.* (less-affected theme)
 already 1SG.POSS eat-GV2 already
 ‘(Some of) them have been eaten by me.’

- (29)a. *jima ga bu-un ka qbhni da.* (affected theme)
 already just shoot-GV1 NOM bird already
 ‘The bird has been shot.’

- b. *jima ga bu-an ka qbhni da.* (less-affected theme)
 already just shoot-GV2 NOM bird already
 ‘The bird has been shot at.’

4.1.5 MOOD. Mood is a distinction between realis and irrealis encoding of events.¹⁷ *-un* is used to express a realis event (i.e., indicative), as in (30). However, *-an* is used to express an irrealis event (e.g., conditional or negative), as in (31a), (31b) and (31c); an action does not actually occur.

- (30) *wada uq-un/*an Lowking ka idaw nii da.*
 already eat-GV1 Lowking NOM rice this already
 ‘The rice has been eaten by Lowking.’

- (31)a. *nasi su q-n-q-an/*un ka idaw do, iya mah-i ka sinaw nii da.*
 if 2SG eat-PRF-GV2 NOM rice PAUS NEG drink-IMP NOM wine this then
 ‘If you have eaten the rice, do not drink this wine then.’

- b. *aji mu e-n-sa-an/*un ka alang Karingku.*
 NEG 1SG INS-PRF-go-GV2 NOM city Karingku
 ‘I have not been to Karingku city before.’

- c. *ini na py-an/*un-i nhapuy ka bubu.*
 NEG 3SG cook-GV2-IMP meal NOM mother
 ‘He does not cook for his mother.’

¹⁷ Mood is one of the parameters described in (G) as made in Hopper and Thompson 1980:252.

4.1.6 AGENCY. Participants high in agency can affect a transfer of an action, whereas participants low in agency cannot. *-un* is used with participants high in agency where a perceptible event has perceptible consequences, as in (32a); however, *-an* is used when the participant is low in agency where it is just a matter of internal state, as in (32b).

(32)a. sklwi-un ku na ka Lowking
 surprise-GV1 1SG 3SG NOM Lowking
 ‘Lowking surprises me.’

b. sklwi-an ku na ka btunux nii
 surprise-GV2 1SG 3SG NOM stone this
 ‘The stone surprises me.’

The six factors—ASPECT, PARTICIPANT, TELICITY, AFFECTEDNESS OF THEME, MOOD, and AGENCY—are all involved in different aspects of intensity with which an action or event is transferred from one participant to another. The differences between *-un* and *-an* with respect to these factors are summarized in table 5. In sum, the difference between *-un* and *-an* is that *-un* is more transitive than *-an* in terms of these six factors.

TABLE 5. Parameter of transitivity.

PARAMETERS	HIGH <i>-un</i>	LOW <i>-an</i>
PARTICIPANT	agent and theme	agent
ASPECT	complete	incomplete
TELICITY	telic	atelic
AFFECTED-NESS OF THEME	total affected-theme	less affected-theme
MOOD	realis	irrealis
AGENCY	agent	non-agent

5. CONCLUDING REMARKS. The verbal affixes in Seejiq are *m-*, *-un*, *-an*, and *s-*. While the distribution of *(-)m-* and *s-* is relatively regular, the analysis of *-un* and *-an* morphology is controversial when their distributions are closely reexamined. Generally, two different previous analyses are found in the Seejiq literature. First, *-un* and *-an* have been treated as a Philippine-type of “focus” construction and considered as patient focus and locative focus, respectively. Second, these two morphemes are viewed as separate “voice” morphemes, and under the cover term Goal voice morpheme; *-un* is considered GV1, whereas *-an* is GV2. A number of parameters affect the distribution of *-un* and *-an*, including the affectedness of object, the affectedness of subject, aspect/mood, and extension of the predicate. However, neither the focus- nor the voice-based approach successfully clarifies the difference between these two mor-

phemes; careful attention to the use of *-un* and *-an* reveals that it is problematic to conclude that *-un* is PF whereas *-an* is LF.

I argue that *-un* and *-an* are separate voice morphemes, and are under the cover term Goal voice morpheme. Although they both represent Goal voice, the difference between them is their degree of transitivity, since there is an overlapping distribution in their use. After careful examination of their use and distribution, I propose that their difference is not strictly of voice/focus, but of the degree of transitivity in the sense of Hopper and Thompson 1980. The transitivity of *-un* and *-an* is on a continuum and is defined by both morphosyntactic and semantic factors containing PARTICIPANT, ASPECT, TELICITY, AFFECTEDNESS OF THEME, MOOD, and AGENCY. According to the Truku data shown above, I conclude that *-un* has high transitivity and *-an* low transitivity.

Since *-un* has high transitivity, which is a signal of foregrounding, whereas *-an* has low transitivity, which indicates backgrounding in the utterance, one remaining question is whether *-un* and *-an* are distributed according to grounding, with *-un* in the foreground and *-an* in the background. Next, following Hopper and Thompson 1980, I will look at their distributions in various kinds of narrative in Truku, to find out whether (i) a verb with *-un* elicits special attention, so that the audience is expected to focus on it; and (ii) a verb with *-an* is only supportive and explanatory, and conveys less significant new information. At the same time, I would like to pay attention to the pragmatic nature of the grounding distinction in discourse, because this provides the key to understanding the grammatical and semantic facts of a language. It is hoped that the current insights and future research will be valuable in interpreting certain morphosyntactic phenomena in the Seejiq language in Taiwan.

ABBREVIATIONS

1	first person	NOM	nominative
2	second person	OBL	oblique
3	third person	PAU	pause
AF	agent focus	PCL	particle
AV	actor voice	PF	patient focus
BF	beneficiary focus	POSS	possessive
CV	conveyance voice	PRET	preterite
FA	focus affix	PRF	perfect
FUT	future	PRFV	perfective
GEN	genitive	PROG	progressive
GF	goal focus	PRS	present
GV	goal voice	PRX	proximal
IF	instrument focus	PST	past
IMP	imperative	RDP	reduplication

INS	insertion	RV	referential voice
LF	locative focus	SG	singular
LOC	locative	TAM	tense-aspect-modality
LV	locative voice	TF	theme focus
NEG	negation	TOP	topic

REFERENCES

- CHANG, YUNG-LI. 2000. *A reference grammar of Seejiq*. Taipei: Yuan-liu Publishing Co.
- HIMMELMANN, NIKOLAUS P. 2002. Voice in western Austronesian: An update. In *The history and typology of western Austronesian voice systems*, ed. by Fay Wouk and Malcolm Ross, 7–16. Canberra: Pacific Linguistics.
- HIMMELMANN, NIKOLAUS P. 2005. The Austronesian languages of Asia and Madagascar: Typological characteristics. In *The Austronesian languages of Asia and Madagascar*, ed. by Alexander Adelaar and Nikolaus P. Himmelmann, 110–81. Oxon: Routledge Language Family Series.
- HOLMER, ARTHUR J. 1996. *A parametric grammar of Seejiq*. Lund: Lund University Press.
- HOPPER, PAUL J., and SANDRA A. THOMPSON, 1980. Transitivity in grammar and discourse. *Language* 56(2):251–99.
- KRAUSS, MICHAEL. 2007. Classification and terminology for degrees of language endangerment. In *Language diversity endangered*, ed. by Matthias Brenzinger, 1–8. Berlin: Walter de Gruyter & Co. KG Publishers.
- NOWMAW, PUSI, and YUDAW PISAW. 2007. *Kari Truku*. Hualien: Council of Indigenous People.
- ROSS, MALCOLM, and STACY FANG-CHING TENG. 2005. Formosan languages and linguistic typology. *Language and Linguistics* 6:739–81
- SCHACHTER, PAUL S., and FE OTANES. 1972. *Tagalog reference grammar*. Berkeley: University of California.
- TSUKIDA, NAOMI. 2005. Seediq. In *The Austronesian languages of Asia and Madagascar*, ed. by Alexander Adelaar and Nikolaus P. Himmelmann, 291–325. Oxon: Routledge Language Family Series.

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