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Amini ang Linawis: A Grammatical Sketch of the Bantayanon Variety of Madridejos

Brian Salvador C. Baran

Abstract

Spoken in Madridejos (Lawis), Linawis is an underdocumented variety of the understudied Bisayan language Bantayanon [bfx]. This study attempts to provide further Bantayanon dialectal data by documenting and describing the Linawis variety and its grammar as it is used by a highly multilingual community, and to provide materials for Linawis corpora, literature, and pedagogy. To fulfill these objectives, both elicited and naturalistic texts were collected, transcribed, and analyzed. The data reveal that Linawis features abundant code switching and mixing and phonolexical variation. The variety has 15 consonant phonemes, three vowel phonemes, phonemic stress, and four major morphosyntactic classes: particles, nouns, verbs, and adjectives, and a residual class of adverbs. Some morphosyntactic strategies are also used to highlight pragmatic concerns, e.g., TOPICS and FOCI, information recency, and HESITATION. This grammatical system of Linawis is characterized by the speakers' large linguistic repertoires, synchronic variation, and syncretism in grammatical markings and pronominal forms, as well as possibly unique phenomena, e.g., non-THEME marking of the NEUTRAL =*y*. All these paints a picture of a robust and dynamic Bantayanon variety.

1 Introduction

Bantayanon [bfx] is a member of the Central Bisayan branch of the Bisayan group of languages.¹ The language is spoken in the municipalities of Madridejos (also called Lawis), Bantayan, and Santa Fe (also called Ogtong) on the Bantayan islands in the province of Cebu, Central Visayas, Philippines (see Figure 1). Located centrally in the Visayan sea, the Bantayan islands are in the middle of the maritime and linguistic crossroads of the Visayas (Carabio-Sexon, 2007, pp. 22–29, 79–80). The islands have been a hotspot for emigration since the 1800s when Capiznons and Cebuanos started

¹Bantayanon is considered a transitional language between the Cebuan sub-branch and Hiligaynon of the Peripheral sub-branch in Zorc (1977, p. 170). Note also that "Bantayanon" is the umbrella term for the language and not all speakers refer to the language as Bantayanon (see Section 3).

migrating to the islands (Allen, 2022, p. 57) until more recent years when fisherfolk from neighboring islands including Cebu, Negros, Panay, Masbate, Leyte, and Samar fished in the islands' waters eventually settle in (Baran, field notes, April 8–13, 2023).² These migrants would also bring their respective languages with them.

Figure 1

A Map of the Bantayan Islands Inside the Bantayan Municipal Hall



Despite the influx of migrants and their languages, I have observed that Bantayanon, considered the indigenous language of the Bantayan islands (Allen, 2022, p. 51), is still being maintained among native, immigrant, and emigrant populations with varying

²During my fieldwork, I met a Masbatenyo in Santa Fe and a Negrense, Cebuano, and Mindanaoan in Madridejos. All of them settled on the island of Bantayan after each having married a local. Many of the language partners have also lived for some time outside the Bantayan islands and have been influenced by the languages where they migrated.

degrees of use and mixing of migratory languages like Cebuano, Hiligaynon, Capiznon, Waray, and Masbatenyo (Baran, field notes, April 11–13, 2023). The number of users of Bantayanon, however, is said to be decreasing (Allen, 2022, pp. 76–80) and Ethnologue currently lists the Bantayanon speaker population at 71,600 and gives it a Threatened (6b) evaluation (Eberhard et al., 2024),³ that is, the language is "...used for face-to-face communication within all generations, but it is losing users."

The low number of users and the mixing of migratory languages may be the reason why Bantayanon's language-hood has not been established for the longest time. Bantayanon was formerly considered a Cebuano or Hiligaynon dialect (see Allen, 2022, p. 1); however, Carabio-Sexon (2007, p. 85) determines that Bantayanon is a distinct language because it is not highly intelligible to either Cebuano or Hiligaynon. Allen (2022, p. 75) further develops this point by showing that Bantayanon itself has its own dialects (or geographic varieties). These are: (a) Sinantape (also called Santapehanon or Sintantapehanon), which is spoken in the municipality of Santa Fe; (b) Binantayan (also called Bantayanon or Binantayanon), spoken in the municipality of Bantayan; and (c) Linawis (also called Lawisanon or Linawisanon), which is spoken in the municipality of Lawis).

Although Bantayanon has now been deemed a distinct language, it remains to be understudied. As of December 2023, there are yet to be any published studies focusing solely on the language. Compare this to the neighboring Cebuano [ceb] which has numerous published grammars, studies, and dictionaries (Tanangkingsing, 2009, pp. 9–16).

In terms of unpublished studies, Bantayanon is described in Carabio-Sexon's (2007) master's thesis on Bantayanon's sociolinguistic profile, Allen's (2022) dissertation on Bantayanon grammar and sustainable use, Baran's (2023d) conference presentation on Bantayanon discourse particles, and Baran and Dizon's (2023) conference presentation comparing Bantayanon and Okinawan existential-possessive-locative (EPL) clauses. The language is also partially discussed in published studies including Zorc's (1977) study on the subgrouping of Bisayan languages and the reconstruction of Proto Bisayan, Lobel's (2013) comparative study on the languages of the Philippines and North Borneo. I have also discussed Bantayanon partially in an undergraduate paper on the lateral deletion phenomenon in the language of Visayas and Mindanao (Baran, 2022). Layague (2016) and the Bantayanon Language Project (n.d.) are the only publicly available dictionaries of the language to date.

Bantayanon still needs to be studied more and currently, there is a lack of dialectal data (Allen, 2022, p. 161). The three major works by Carabio-Sexon (2007), Layague (2016), and Allen (2022) extensively cover Binantayan but do not focus on Linawis, and according to Allen (2022, p. 75), another researcher is currently documenting Sinantape. Because Linawis is the only variety among the three that has yet to have a dedicated

³Allen (2022, pp. 76–80) also evaluates Bantayanon as Threatened (6b). My observations, however, are that Bantayanon (at least in Madridejos) is spoken almost exclusively within the community, but code mixing and switching is pervasive. Although according to some language partners, the younger generations' Bantayanon now has many Cebuano, Hiligaynon, and Tagalog loans, which shows the dynamic nature of the language and the highly multilingual context of the island. More research is needed to fully assess the vitality of Bantayanon.

study and my positionality as a Lawisanon descendant,⁴ the focus of this study is on documenting and describing the phonological, morphosyntactic, and pragmatic features of the Linawis variety.

2 Methodology

In language documentation, Gippert et al. (2006) recommends the final output to be a "lasting, multipurpose record of a language" (p. 1) and so, this study aims to create a naturalistic description of Linawis as it is used by a highly multilingual community, and compile a preliminary Linawis corpus which can be used as materials for literature and pedagogy. As such, the data for this study is primarily conversational and narrative-based. The transcription was done on ELAN (2022) and further annotated with Fieldworks Language Explorer (FLEx).

2.1 Data Collection and the Language Partners

The corpus consists of around five hours and 40 minutes of conversational data and around five hours and around 42 minutes of local stories collected during fieldwork in 2022 (see Baran, 2023d) and 2023.^{5,6} In addition, an Existential-Possessive-Locative (EPL) sentence list collected in 2022 (see Baran & Dizon, 2023) is used to supplement the naturalistic texts.⁷ Five hours and 21 minutes of the 11 hours and 22 minutes of recordings have been transcribed and further glossed.⁸ The data were provided by language partners (see Section 9.2). The veracity of the data and analyses were also confirmed with them. The partners are from Barangays Talangnan (Tyangnan), Poblacion (Lawis), Mancilang, Malbago, Pili, and San Agustin (Tinaan) in the municipality of Madridejos (see Figure 2).

To protect the language partners, the details of the project, as well as important ethical considerations such as confidentiality and attribution, as well as data access and storage, were explained to them. Moreover, informed consent was asked from each participant at the beginning of the recording sessions. COVID-19 health protocols were followed during data collection.

2.2 Presentation and Archiving

Phonemic transcriptions are presented inside forward slashes / / while phonetic transcriptions are presented inside square brackets []. These transcriptions are represented

⁴My mother and her direct family are Madridejos emigrants and inactive L1 speakers of Linawis. I can speak Linawis to a basic level.

⁵Data collection was conducted in a mix of Bantayanon and Cebuano.

⁶Based on Levshina et al. (2021), language partners were asked to converse about any topic for 20–60 minutes.

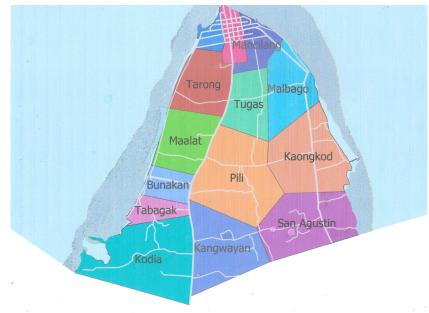
⁷The language partner was asked to translate a 70-sentence list, modified from the UP Department of Linguistics 700+ sentence list.

⁸For those interested in the corpus, feel free to reach out to the author.

Baran

Figure 2

A Map of Madridejos (Lawis), Provided by the Madridejos Community Water Service (April 11, 2023)



with the characters from the International Phonetic Alphabet. The homorganic nasal, however, is represented as /N/.

Although Allen (2022, pp. 131–146) has a suggested Bantayanon orthography, it is still not widely used or recognized among Lawisanons as of December 2023.⁹ Since the Cebuano orthography is still the common method of writing Linawis (Baran, field notes, April 8–13, 2013), sample items and sentences are presented following the orthographical conventions used by the Department of Education in the implementation of the MTB-MLE program in Region VII (see Godin, 2017). Since stress and the syllable-final glottal stops are unrepresented in the said orthographical conventions, for instructional purposes, stress on disyllabic words is represented with an acute accent on a vowel, e.g., \hat{a} , and syllable final glottal stops are represented with a grave accent on a vowel, e.g., \hat{a} (cf. Wolff, 1972). If both occur, the circumflex accent is used, e.g., \hat{a} (cf. Santos, 2019, pp. 78–81).¹⁰

⁹The Lawisanon section of the primers and consent forms were written with Allen's (2022) proposed orthography but there were several instances where language partners corrected my spelling, e.g., instead of Allen's (2022) *atun* 'our,' they preferred *aton* 'our' which reflects Cebuano orthographical conventions of using *o* to represent /u/ at the final syllable of root words (see Godin, 2017). This shows that using the Cebuano orthography to write Linawis is still the norm and this is reflected in this study.

¹⁰Lawisanons do not use diacritics when writing Linawis. Diacritics allow the examples to not stray too far from the orthographical conventions of the community, i.e., words with diacritics are still immediately recognizable to a Lawisanon, and at the same time, make the examples instructional to the reader who might not be familiar with Linawis.

Examples are presented with English translations inside single quotation marks ' '. Sample sentences are also presented following the Leipzig Glossing Rules (see Comrie et al., 2015).

With proper consent, all data and outputs from this project are made available to future researchers and community members upon request. A proposed Bantayanon translation of parts of this paper can be found on https://tinyurl.com/AminiAngLinawis.

3 The Linawis Variety

The people of Madridejos call themselves *Lawisánon* which comes from *Lawís*¹¹ 'Madridejos' and -(h)*ánon* 'ORIGIN'. They call their spoken variety derivatives of the generic *Bisayâ* 'Bisayan' or derivatives of the specific toponym *Lawís* (Baran, field notes, October 22–23, 2022).¹² In intra-community contexts, the Lawisanon prefer calling their variety *Bisayâ* or *Binisayâ* with the infix <in> 'SPEECH'.

In extra-community contexts, Lawisanons may call their variety (a) *Lawisánon* (the demonym), (b) *Linawís* 'Madridejos speech,' or (c) *Linawisánon* 'Lawisanon speech.' Lawisanons may also call their variety derivatives of *Bantáyan*, *Cebú*, or *Súgbo* 'Cebu' when highlighting their membership to the larger Bantayan and Cebuano communities respectively. While Lawisanons have no problem using these different names in different contexts to suit their needs, I refer to the variety as *Linawis* in this study for consistency, economy, specificity, and my own familiarity.

As a member of the Cebuano linguistic community, I find that Cebuano speakers might easily mistake Linawis for Cebuano. In fact, some language partners consider Linawis to be a variety of Cebuano that is heavily influenced by neighboring languages. Aside from the Philippines' official languages, English and Filipino/Tagalog [tg1], Cebuano is spoken in many formal contexts,¹³ e.g., the church (Carabio-Sexon, 2007, pp. 110–111).¹⁴ You would rarely see signages written entirely in Linawis, as many signs are written entirely in standard Cebuano (see Figure 3).¹⁵ Bantayanons in general also tend to use Cebuano when talking to strangers or outsiders (Carabio-Sexon, 2007, p. 120; Allen, 2022, pp. 152–154). There was one instance where a Lawisanon spoke exclusively in Cebuano with me even after attempting to engage in Linawis; however, they immediately switched to speaking Linawis when a family member talked to them.¹⁶

¹¹*Lawis* may be related to ceb *lawis* 'a point of low land extending from the shore into the water' (Wolff, 1972).

¹²This is common among Bisayan communities (Zorc, 1977, pp. 5–6), e.g., Cebuano may be referred to as *Cebuano, Sinibwano, Sinugboanon*, or *Sugboanon* from *Cebu* or *Sugbo* (specific toponym), or *Binisaya* or *Bisaya* from *Bisaya* (generic ethnonym).

¹³Government announcements tend to—but not always—be in Standard Cebuano. For example, the official page of the government of the Municipality of Madridejos posts either in Standard Cebuano or in English. Linawis, however, appears in the comments alongside Cebuano and English.

¹⁴Last I attended mass in Madridejos, I observed that only the homily had some Linawis elements.

¹⁵Standard Cebuano refers to the Sialo variety of Southeastern Cebu (Endriga, 2010, p. 11).

¹⁶I have been told by some language partners that I have a clear Cebuano *tóno* 'tune, accent' when trying to speak Linawis, so this may also be a factor.

Baran

Figure 3

(October 23, 2022) Ang Lungsod sa Madridejos nagpahibalo sa mga hingtungta nga adunay amoroso o obligasyon sa pagbayad. Sa ilang mga bayronon didto sa opisina sa tresury.

A Municipal Notice Written in Standard Cebuano, Taken at the Madridejos Municipal Cemetery

Note. The translation of the Cebuano text is as follows: "The municipality of Madridejos wishes to inform the concerned people that you are obligated to pay your dues. For payments, proceed to the treasury office."

The influence of Cebuano on Linawis is historically attested. Bantayanon is said to have developed from a variety of Old Waray that was inundated with Cebuano lexicon (Allen, 2022, p. 61), comparable to Porohanon as described in Wolff (1967, pp. 65–66). However, Cebuano is not the only language that has influenced Linawis.

Language partners often refer to Linawis as a *saksaksinágol* 'hodgepodge' of Cebuano, Hiligaynon, Waray, Masbatenyo, Binantayan, and Sinantape (Baran, field notes, October 22–23, 2022).¹⁷ Bantayan's multilingualism and the large linguistic repertoires of Bantayanon speakers are reflected in the use of Waray and Masbatenyo in the market (Carabio-Sexon, 2007, p. 110), and the influx of Cebuano and Hiligaynon-speaking immigrants (Allen, 2022, p. 53) which resulted in the use of Cebuano in formal domains, e.g., church and government, and the use of Hiligaynon loanwords, e.g., hil *subóng* sometimes replacing Linawis *sarâ* 'now' or hil *tanì* sometimes replacing the particle *kúntà* 'HYPOTHETICAL.'

¹⁷Many language partners mentioned having limited proficiency in Tagalog and English. Some language partners who have never lived in or near Hiligaynon-speaking areas mentioned having limited to zero proficiency in Hiligaynon and some language partners who have not lived in Cebu also mention having limited to zero proficiency in Cebuano. One language partner who lives in the interior of Lawis and has never left Bantayan has mentioned that they only speak Linawis.

Language partners mention that historically and even at present, fisherfolk from other islands come to fish in Lawis' waters¹⁸ and some eventually marry into Lawisanon families. I did in fact meet Cebuano, Masbatenyo, and Ilonggo fishermen who married Lawisanon women and now speak Linawis as their everyday language but with heavy influence from their respective languages. Many of the language partners have also lived outside Madridejos and have been influenced by the languages of those areas. Cebuano, however, remains the biggest language in contact with Linawis due to local media being in Cebuano (Baran, field notes, October 22–23, 2022)¹⁹ and the MTB-MLE program stipulating Cebuano as the medium of instruction for Grades 1–3 in Central Visayas (Allen, 2022, pp. 79–80).

Due to both the tendency of speakers to switch to Cebuano and the influx of Cebuano lexicon, Linawis may seem like Cebuano to outsiders, but while there are many Cebuano loans, Linawis is still a robust variety of Bantayanon. Instead of shifting entirely to one language, Linawis speakers negotiate their variety with the more prestigious Cebuano and other languages used in Linawis, resulting in a variety that is characterized by prevalent code-switching (1) and code-mixing (2). The former is the switching of languages across sentence boundaries while the latter is the embedding of linguistic units from different languages within a sentence (Tay, 1989, p. 408).

 (1) Sayóp! Sorry. Táo lang pò mistake sorry human only POLITE (Linawis) (eng) (tgl)
 (/TL //)

'(That's) wrong. Sorry. (I'm) just human.'

(2) akon gi-pangáyo nga taga-Ø-an tánì =ta1sg.npm U.IRR.PFV-ask MOD give-U.IRR-APPL HYPOTHETICAL =1PL.INCL.PM (Linawis) (hil) (Linawis) sákto puhónan then og sa OBL capital then NPM.INDF correct (ceb) (Linawis) (tgl) (eng) 'What I'm asking for is that they hopefully give us enough capital and (only) then...'

Code-switching and code-mixing are so prevalent in Linawis that the latter even occurs in the written language (see Figure 4). There is typically more mixing of Cebuano elements in more formal, more intercommunity contexts until there is a switch to mostly Cebuano in contexts such as government announcements or church service. On the other hand, there is less mixing of Cebuano elements in more intimate, more intracommunity contexts such as speaking among family members until there is a switch to mostly Linawis.

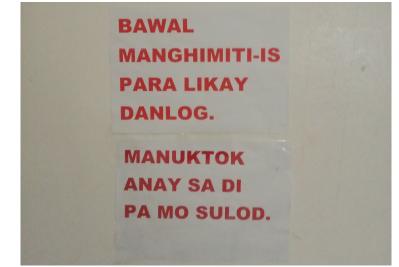
¹⁸The language partner *Lóla* Teresita mentions that Lawis was once dubbed "the Alaska of the Philippines" because of the once lucrative fishing and seafood industry of the municipality.

¹⁹According to some language partners, Bombo Radyo Iloilo, which is predominantly in Hiligaynon, was more commonly heard before.

Baran

Figure 4

Comfort Room Sign With Code Mixing of Linawis ánay 'PREPARATIVE', tgl báwal 'PROHIBITIVE', and ceb sulód 'enter', Taken at the Madridejos Municipal Hall (April 18, 2023)



Note. The translation is as follows: "Do not wash your feet to avoid making the floor slippery. Knock first before entering."

While pervasive, code-mixing does not necessarily indicate the loss of native vocabulary and according to Yakpo (2015, p. 267), code-mixing items are not obligatory. In (3) for example, the language partner *Nong* Wilfred uses the standard Cebuano or Hiligaynon associated *sulô* [su'lo?] 'torch' in one utterance, switches to the northern Cebuano associated *s'ò* ['su:?] 'torch' in the next, and then Linawis *syò* ['ʃju?] 'torch' in the following utterances. Mixing is so rampant that features which some partners consider shibboleths of Linawis, e.g., *lat* 'RELATIONAL' and *guráng* 'old' (Baran, field notes, October 22–23, 2022) may regularly be replaced with Cebuano forms, namely *pod* or *sad* and (*ti*)*gúwang* respectively (J. Baran, personal communication, 2023).

(3) **Sulô** sulô. Ngm. S'ò là. lakát ka. ba. torch RESTRICTIVE.NEGOTIABILITY torch yup torch only go.out 2sg.pm (ceb/hil) (ceb) Saúna mam-áyle kamí, syò ámo=ng before A.IRR.DISTR-Social.dance 1PL.EXCL.PM torch 1pl.excl.npm=mod (Linawis) gamít-Ø-on use-u.irr-pr.cpv

'Torches (right)? Yup, torches. You just (bring) a torch and you go out. Back then, when we went dancing, we would use a torch.'

Even in phonology, code-mixing is evident. Items which had their laterals diachronically vocalized to [j] in Bantayanon (e.g., Proto-Bisayan *balay 'house' > bfx *byay*) (see Allen, 2022, pp. 93–94) may be replaced by items from Standard Cebuano which do

not have this diachronic sound change (i.e., ceb *balay*).²⁰ In some cases, these items may further undergo intervocalic lateral deletion which is found in the Bohol, Leyte, and Northern Cebu varieties of Cebuano,²¹ e.g., Proto-Bisayan *baláy > *baláy* > *b'ay* ['ba:j] (see Endriga, 2010, p. 8; Baran, 2022). Speakers do all these mixes—and even switches—depending on individual preferences and the contexts of the speech event.²² All these alternant forms paint a picture of the complex and large linguistic repertoire of a Linawis speaker.

Hereon, the sources of possible loans are indicated as subscripts. The source languages are abbreviated as follows: ceb (Cebuano/Binisayâ), eng (English), hil (Hiligaynon), spa (Spanish), tgl (Tagalog), and war (Waray).

4 Phonology

This section briefly describes the phonemes, or the meaningful or contrasting sounds (Aikhenvald, 2015, p. 46), that form the phonological inventory of Linawis as well as the organization of these phonemes into syllables. The Linawis inventory includes consonants, vowels, and phonemic stress.

4.1 Consonants

Consonants are made by momentarily blocking or restricting airflow in the vocal tract to produce a sound (O'grady & Archibald, 2015, p. 20). Linawis has 15 consonant phonemes with voiceless (left) and voiced (right) stop pairs (see Table 1). The latter involves the vibration of the vocal cords while the latter does not (Hayes, 2009, pp. 6–7). Some realizations of Linawis' consonant phonemes are optional for reasons yet to be determined. They are labeled with the OPTIONAL subscript. One consonant, the homorganic nasal /N/, is included in Table 1 but its phonemic status is still unclear.

Table 1

	Bila	bial	Der	ntal	Alveolar	Palatal	Ve	lar	Glottal
Stop	/p/	/b/	/t/	/d/			/k/	/g/	/?/
Nasal	/r	n/	/1	n/			/1	ŋ/	
					(/N/)				
Fricative					/s/				/h/
Approximant		V/ velar			/1/	/j/			

²⁰Another example is Barangay Talangnan (see Section 2.1) which can be ['tʃʌŋnʌn] or [tʌ'lʌŋnʌn].

²¹This is exemplified by the Metro Cebu variety of Cebuano, one of my first languages.

²²Whether Linawis speakers are conscious of these changes is a question for future research.

4.1.1 Stops

Table 2	
---------	--

Linawis Stops

Phoneme	Realizations	Environments	Examples	
/p/	[p]	all	/' p a∕ [' p ɑ]	pa 'persistence'
/b/	[b]	all	/ba/ ['ba]	ba 'confirmatory'
	$[\beta]_{OPTIONAL}$	_V	∕' b u.kid∕ [' β u:.kɪd̯]	<i>búkid</i> 'mountain'
/t/	[t̪]	all others	/'ta/ ['ṯɑ]	ta '1sg.npm'
	[ţʃ]	$\{/s/, /j/, /l/\}$	∕'tlus∕ [' tʃ ∪s]	<i>tyos</i> 'approach'
/d/	[d]	all others	/' d a∕ [' d a]	da 'restrictive'
		in loanwords	/sa.ba.ˈ d u/ [sʌ.bʌ.ˈ d ̯o]	sabadó 'Saturday'
	[1/1/1]	V_V	/ba.'ja. d an/ [bʌ.'jɑ.rʌn̯]	bayáran 'pay'
		in loanwords	/ˈk d u.du/ [ˈkɾuːd̯o]	krúdo 'oil'
	[dʒ]	$\{/s/, /j/, /l/\}$	/' d la/ [' dֵʒ ʌ]	<i>dya</i> 'bring'
	[l/ð] _{optional}	_V	/' d id.tu∕ ['ðīḍ.t̪ʊ]	<i>dídto</i> 'there'
			/ˈ d a.jun/ [ˈ lɑ:. jon]	<i>dáyon</i> 'then'
/k/	[k]	all	/ka.'mut/ [ka.'mʊt̪]	<i>kamót</i> 'hand'
	$[x/\chi]_{\text{optional}}$	_V	/'?a.kun/ ['?a.xunֳ]	ákon '1sg.npm'
/g/	[g]	all	/ga.'mut/ [gʌ.'mʊt]	<i>gamót</i> 'root'
	$[\gamma]_{\text{optional}}$	_V	/ba.' g a/ [bʌ.'ɣʌ]	<i>bagá</i> 'similarly'
/?/	[?]	all	/'?i.la(?)/ ['?i.lʌØ]	<i>íla</i> 'infatuate'
	$\emptyset_{\rm optional}$	#	[manaatt

Stop consonants are produced by momentarily blocking the airflow in the vocal tract to produce a sound (Hayes, 2009, p. 7). Linawis has seven stop phonemes with three

voice pairs (see Table 2). These are the bilabials /p/ and /b/, the dentals /t/ and /d/, the velars /k/ and /g/, and the glottal /2/.

Bilabial stops are produced "by touching the upper and lower lips" to momentarily block air flow (Hayes, 2009, p. 8). The voiceless bilabial stop /p/ is always realized as [p] in all environments while the voiced bilabial stop /b/ is always realized as [b] in all environments except before vowels where it may be realized as a voiced bilabial fricative [β].

Dental stops are produced "by touching the tongue to the upper teeth" to momentarily block air flow (Hayes, 2009, p. 8). The voiceless dental stop /t/ is realized as an affricate $[t_j]$ before /s/, /l/, and /j/ and as $[t_j]$ elsewhere. The voiced dental /d/ is [r], [r], or $[I]^{23}$ intervocalically and as an affricate $[d_3]$ before /s/, /l/, and /j/. Unlike in Allen (2022)[84–88], [r/r/I] is considered allophonic to /d/ due to their limited distributions.²⁴ /d/ may also be realized as a lateral approximant [l] or a dental fricative [ð] before vowels. In loanwords and elsewhere, /d/ is realized as [d].

Velar stops are produced "by touching the body of the tongue to the hard or soft palate" to momentarily block air flow (Hayes, 2009, p. 10). The velars /k/ and /g/ are produced as the stops [k] and [g] respectively in all environments. Before vowels, however, they may also be produced as the fricatives [x] or [χ] and [γ] respectively.

The glottal stop /?/ is produced "by moving the vocal cords close to one another" to momentarily block air flow (Hayes, 2009, p. 10), thereby having the realization [?]. /?/ may be deleted in word-final positions. Except for older speakers in Barangay San Agustin, /?/ has not been observed to occur before consonants in non-reduplicated syllables, e.g., San Agustin *gâbi* /ˈga?bi/ 'night' versus the more common *gáb-i* /ˈgab?i/ 'night' (see also Allen, 2022, pp. 96–97).

4.1.2 Fricatives

Fricative sounds are created by making a tight constriction in the vocal tract to create a turbulent flow of air (Hayes, 2009, p. 7). Linawis has two voiceless fricative consonants. These are the alveolar /s/ and the glottal /h/ (see Table 3).

The alveolar /s/ is produced when a tight constriction is made in the vocal tract "by touching the tip or blade of the tongue to a location just forward of the alveolar ridge" (Hayes, 2009, p. 8). /s/ is realized as a post alveolar [\int] before /j/ and /l/. Elsewhere, /s/ is realized as [s].

The glottal /h/ is produced when a tight constriction is made in the vocal tract "by moving the vocal cords close to one another" (Hayes, 2009, p. 10). /h/ is realized as [h] in all environments. It is sometimes deleted, however, for still unclear reasons.

²³The [I] allophone may be an influence from English. This allophone is not observed among the older language partners.

²⁴The allophony between the liquids /l/, /d/, and /r/ is historically attested in prevocalic/intervocalic positions among Bisayan languages (Zorc, 1977, pp. 216–219), but it is still unclear if the Linawis /d/ > /l/ sound change (see Table 2) is diachronic or synchronic. There is currently insufficient evidence to support the phonemic status of /r/ in Linawis.

Phoneme	Realizations	Environments	Examples	
/h/	[h]	all	/ h u.'(l)at∕ [h u.'wʌt̪]	<i>huwát</i> 'wait'
	$\emptyset_{\rm optional}$	all	/bu.ˈ(h)i.?an/ [ˈbw Ø i:?ʌn̯]	<i>bwían</i> 'release'
			/(h)a.mu.ˈtaŋ/ [ʔʌmʊˈt̪ʊŋ]	<i>hamutáng</i> 'settle'
/s/	[s]	all others	/su.'(l)at/ [sʊˈwɑt̪]	<i>suwát</i> 'write'
	[ʃ]	_{/j/, /l/}	∕'slud∕ [' ∫ j∪d]	syod 'inside'

Table 3

Linawis Fricatives

4.1.3 Nasals

Nasal consonants are produced by lowering the velum to redirect the air flow in the vocal tract through the nose (Hayes, 2009, p. 7). Linawis' four nasal consonants are the

Table 4

Linawis Nasals

Phoneme	Realizations	Environments	Examples	
/m/	[m]	all	/' m a/ [' m a]	ma 'mom'
/n/	[n]	all	/'na/ ['nʌ]	ท <i>ิ</i> ต 'TRANSFORMATIVE
/ŋ/	[ŋ]	all	/'ŋa/ ['ŋ∧]	nga 'modifier'
			/pa ŋ .'ba.jad/ [pʌ ŋ .'bɑ:.jʌd̯]	pangbáyad 'payment'
/N/ (?)	[ŋ]	all others	paN- + kuha /pa. 'ŋ u.ha?/ [pʌ' ŋ u:hʌ?]	pangúhà 'getting'
	[m]	_[BILABIAL]	paN- + bayad /pa.' m a.jad/ [pʌ' m ɑ:jʌd̯]	pamáyad 'pay up'
	[¤]	_[dental]	maN- + syod /ma.'njud/ [mʌ'njud]	<i>manyód</i> 'going inside'
	[n]	_[ALVEOLAR]	maN- + labang /ma n .ˈla.baŋ/ [mʌ n ˈlɑːbʌŋ]	<i>manlábang</i> 'crossing'

bilabial /m/, the dental /n/, the velar /n/, and the homorganic /N/ (see Table 4). The phonemic status of the homorganic /N/ is unclear.

The bilabial nasal /m/ is produced "by touching the upper and lower lips" while airflow is redirected to the nasal cavity (Hayes, 2009, p. 8) and is realized as [m] in all environments. The dental nasal /n/ is produced "by touching the tongue to the upper teeth" while airflow is redirected to the nasal cavity (Hayes, 2009, p. 8) and it is realized as [n] in all environments. The velar nasal /ŋ/ is produced "by touching the body of the tongue to the hard or soft palate" while airflow is redirected to the nasal cavity (Hayes, 2009, p. 8) and it is realized as [n] in all environments. The velar nasal /ŋ/ is produced "by touching the body of the tongue to the hard or soft palate" while airflow is redirected to the nasal cavity (Hayes, 2009, p. 10) and it is realized as [ŋ] in all environments.

Like /ŋ/, /N/ is also realized as [ŋ], but /N/ is realized as [m] before bilabials, [n] before dentals, and [n] before alveolars. The phonemic status of /N/ is still unclear as it contrasts with /ŋ/ in only one minimal pair: *paN-* 'DISTRIBUTIVE' and *pang-* 'INSTRUMENTAL'. *paN-* affixation causes the obligatory deletion of initial glottal and voiceless bilabial/ dental/alveolar/velar stops of stems while *pang-* does not, e.g., compare *paN-* + *báyad* > *pamáyad* [**pAŋ'mɑ:**Jʌd] to *pang-* + *báyad* > *pangbáyad* [**pAŋ'bɑ:**Jʌd] 'payment' (see also Allen, 2022, p. 91).

4.1.4 Approximants

Approximant sounds are produced with a wide constriction tha allows air to pass without any turbulence (Hayes, 2009, p. 7). Linawis has three approximant phonemes. These are the lateral /l/, the co-articulatory labiovelar /w/, and palatal /j/ (see Table 5).

The lateral approximant /l/ is produced by letting air pass through the sides of the tongue (Hayes, 2009, pp. 7–8). The Linawis /l/ can be realized as [l], [g], [d], [j] or \emptyset . This phoneme has many realizations due to a mix of diachronic and synchronic processes.

Historically, Bantayanon underwent a process of lateral vocalization where Proto-Bisayan *l became Bantayanon [j] in word-final positions, e.g., compare Linawis *bunay* 'whip' to ceb *bunal* 'whip', and where Proto-Bisyan *l became Bantayanon [j] in postconsonantal positions following vowel deletion, e.g., Proto-Bisayan *balay > Linawis *byay* (see also Allen, 2022, pp. 93–94).²⁵ This resulting [j] from diachronic lateral vocalization must be treated as an allophonic realization of /l/ instead of /j/ for two reasons. First, this process is still observed at present during infixation of items with an intervocalic /l/, e.g., *lálom/láwom* /'la(l)um/ 'deep'. When the <g> 'PLURAL' infix is attached to *lálom/láwom* 'deep', the resultant form is *lágyom* /'lag.jum/ with lateral vocalization. The intervocalic /l/ becomes [j] when placed in the post-consonantal position following infixation. Second, post-consonantal [j] from Proto-Bisayan *l, e.g., *syod* /'slud/ 'enter', from Proto-Bisayan *səlád, becomes [l] during metathesis after suffixation, e.g., *syod* 'enter' when affixed with -(*an*)*án* 'LOCUS' becomes *sudlanán* /sud.la.'nan/ 'container'. Metathesis causes [j] to be transferred to the morphological boundary where it becomes [l] for reasons best investigated in a different paper.

Another phonological process associated with /l/ is lateral deletion. In Bantayanon, Porohanon, and some neighboring varieties of Cebuano (Northern Cebuano and Bol-

²⁵See Zorc (1977) for a list of reconstructed Proto-Bisayan forms.

Phoneme	Realizations	Environments	Examples	
/1/	[1]	all others	/'la?/ ['la?]	là 'LIMITING'
	[g]	_[VELAR]	/si.l(i).'ŋan/ [ˈsi g ŋʌn̯]	<i>sígngan</i> 'tell'
	[d] _{optional}	_[PLOSIVE, -VELAR]	/ˈsul.ti/ [ˈsu d tɪ]	súlti 'say'
	[j]	$C_{(non-suffix)}$	∕'slud∕ [ˈʃjʊd]	<i>syod</i> 'inside'
			/ˈlag.lum/ [ˈlʌgjʊm]	<i>lagyóm</i> 'deep.pl'
	$\emptyset_{\rm optional}{}^a$	[POSTALVEOLAR]_	/'t(l)uk/ ['tʃuk]	<i>tyok</i> 'sprout'
		V_V	/'wa(1)a/ ['wɑ:]	w'a 'left'
			/ˈla(l)um/ [ˈlɑ:wm]	<i>láwom</i> 'deep'
			/tiˈŋa(l)i/ [t̪iˈŋɑ:j]	tingáy 'DUBITATIVE'
/w/	[w]	all	/'wa?/ ['waq]	wà 'neg.epl'
/j/	[j]	all	/ja∕ [ˈjɑ]	уа 'емрнатіс'
	$\emptyset_{\rm optional}$	[POSTALVEOLAR]_	/ba.tja.'gun/ [bʌtʃʌ'gʊn̯]	<i>batyagón</i> 'feel symptoms'

Table 5

Linawis Approximants

^a The more formal/clarificatory/emphatic the context, the less likely this sound change occurs. This is exemplified by Barangay Maalat (see Section 2.1) which is [mA'?a!t] or [mA'?a!t]. Some items do not undergo this sound change for still unclear reasons.

anon), the intervocalic /l/ becomes Ø (Baran, 2022). This historical process of Proto-Bisayan *l loss (see Zorc, 1977) continues to be an active process in Bantayanon and the aforementioned languages where lateral deletion is only optional for certain items, e.g., the word for 'head' can either be without lateral deletion $\hat{u}lo$ ['?u:.lo] or with lateral deletion 'o ['?u:]. Complicating this further, both lateral deletion and lateral vocalization or the lack of both can occur in the same item, e.g., the word for 'enter' can be *sulód* [so'lod] (without lateral processes), *s'od* ['su:d] (with lateral deletion), or *syod* ['ʃjud] (with lateral vocalization).

Other processes involving /l/ include the regressive assimilation of /l/ to [g] before velars and the optional assimilation of /l/ to [d] before dentals. The former typically

occurs when a vowel is deleted after affixation, e.g., *siling* 'say' and *-an* 'APPLICATIVE' becomes *signgan*. In other environments, /l/ is realized as [l].

One other notable phonological change with approximants is the affrication of dental and /y/ or /l/ clusters, e.g., *bátyag* 'feel symptoms' and *dya* 'bring', respectively.

The palatal approximant /j/ is produced by letting air pass through a big gap in the center but with a wide constriction near the palate (Hayes, 2009, p. 9). /j/ is always realized as [j] but it is sometimes deleted when a preceding dental or alveolar sound becomes an affricate or postalveolar sound respectively, e.g., *syod* ['sjud] 'enter' > ['ʃud] > ['ʃud].

The labiovelar approximant /w/ is produced by letting air pass through a big gap in the center but with a wide constriction on both the lips and the velum. /w/ is realized as [w] in all environments.

4.2 Vowels

Vowel sounds are produced with little to no restriction in the vocal tract (O'grady & Archibald, 2015, p. 46). Linawis has three vowel phonemes (see Table 6). This is typical of Bisayan languages (Zorc, 1977, p. 47).

Table 6

Linawis Vowel Inventory

	Front	Central	Back
High	/i/		/u/
Low		/a/	

Linawis' vowels are the low central /a/, the high front /i/, and the high back /u/ (see Table 7). /a/ is realized as $[\Lambda]$, [v], $[\alpha]$, or [a]; /i/ as [I], [i], or [e]; and /u/ as $[\upsilon]$, [u], or [o]. When stressed, emphasized, or lengthened, each of the vowels are more likely to be pronounced tensed, e.g., /a/ as $[\alpha]$, /i/ as [i], and /u/ as [u]. /uw/ and /ij/ strings can be realized as [w] and [j] before vowels while /wu/ and /ji/ strings can be realized as [j] after vowels.

4.3 Stress and Length

Stress involves the raising of one syllable's prominence relative to other syllables via increased pitch, loudness, and length and a change in vowel quality (Aikhenvald, 2015, p. 47). Linawis has phonemic stress (see Table 8) but not phonemic length. Vowel length in the variety is caused by one of two phenomena. One, stress placement in the open penultimate syllable causes vowels to be realized as lengthened, but this does not occur in stressed closed penultimate and ultimate syllables. Strings of /a(l)a/ and /u(l)u/ are realized as [a:] and [u:] respectively following lateral deletion (see Table 5). Stress in a syllable also causes optional vowel tensing, e.g., [u] > [u] and [I] > [i].

Table 7

Linawis Vowels

Phoneme	Realizations	Environments	Examples	
/a/	[ʌ/ɐ/ɑ/a]	all	/'?a.g a / ['?a:g a]	<i>ága</i> 'morning'
	lengthened	stressed penultima _{/i/, /u/}	/ti ['] ŋ a (l)i/ [ជ្ជ'ŋ ɑ:j]	tingáy 'DUBITATIVE'
/i/	[ɪ/i/e]	all	/'?a.gi/ ['?a:gi]	ági 'pass'
	lengthened	stressed penultima	/'gida/ ['giːɾɑ]	gira 'war'
	[(ɪ/i/e)j]	_V	/ˈgi(h)a.pun/ [gɪˈjɑ:pun̯]	gyápon 'INVARIANT'
	[j(ɪ/i/e)]	V	/tiˈŋa(l)i/ [t̪ɪˈŋɑːj]	tingáy 'DUBITATIVE'
/u/	[ʊ/u/o]	all	/g u .ˈdaŋ/ [gʊˈɾʌŋ]	guráng 'old'
	lengthened	stressed penultima	/'b u .hat/ ['b uː hʌt̪]	búhat 'do'
	[(ʊ/u/o)w]	_V	/'su(l)at/ ['swa <u>ț]</u>	<i>swát</i> 'write'
	[w(ʊ/u/o)]	V_	∕'la(l)um∕ ['lɑ: w m]	láwom 'deep'

Table 8

Linawis Stress

Position	Examples	
Open penultima	/' ?a .but/ [' ?ɑ: but̪]	<i>ábot</i> 'meet'
Closed penultima	/ˈ ban .taj/ [ˈ bʌn ̥tʌj]	<i>bántay</i> 'guard'
Ultima	/?a.' but / [?ʌ' buț]	<i>abót</i> 'product'
	/ban.ˈ taj / [bʌn̯ˈ tʌj]	<i>Bantáy</i> calling a dog by its name

4.4 Syllable Structure

Phonemes are organized into syllables (Velupillai, 2012, p. 8). The Linawis basic syllable structure is (C)C(C)V(C)(C)(C). It is composed of an obligatory onset consonant (C) and vowel (V) nucleus, an optional consonant coda (C), and stress assignment. For each

polysyllable, there is at least one stressed syllable. Onsets and codas may be composed of up to three consonants, e.g., *skwéla* /'skwi.la/ 'attend school' and *payts* /'pajts/ 'good enough'. Only one consonant in the onset is obligatory and the extra consonants are typically rhotic allophones of *d*, the alveolar fricative *s*, or approximants.

Because of the onset consonant requirement, *q* is always inserted into vowel-initial loanwords, e.g., Linawis *áwto* /'?aw.tu/ from Spanish *automovil*, and when word-initial consonant deletion occurs (see Table 3), e.g., *hamutáng* /(h)a.mu.'taŋ/ > [?ʌ.mu.'t̪ʌŋ] 'settle'. Similarly, /h/ or /?/ is inserted to vowel-initial suffixes when affixed to a vowel-final stem, e.g., *simbáhan* /sim.'ba.han/ 'church' from *símba* 'attend mass' and *-an* 'Locus'.²⁶ The onset consonant requirement is suspended when lateral deletion occurs resulting in the interpretation of two neighboring like vowels as long (see Table 5) and one of two neighboring unlike vowels as an approximant plus an optional vowel (see Table 6). This suspension also occurs for some Hiligaynon loan derivatives, e.g., *alágian* [?ʌ.'lʌg.jʌn̯] 'path' from *ági* ['?ɑ.gɪ] 'pass'.

5 Morphosyntax

This section describes the major morphosyntactic classes in Linawis and their configurations in a clause. In Allen's (2022, pp. 103–104) grammar of Bantayanon, he identifies four word classes on the basis of syntactic distribution: nominals, verbs, adjectives, and particles. In the grammatical descriptions of the neighboring Bisayan languages of ceb and Hiligaynon by Bunye and Yap (1971) and Wolfenden (1971), respectively, morphological differences is the basis for identifying word classes, e.g., defining a particle word class as uninflected forms. For this study, the word classes of Linawis are identified on both syntactic distribution and morphological differences.

There are four major morphosyntactic classes in Linawis: particles (Section 5.1), nouns (Section 5.2), verbs (Section 5.3), and adjectives (Section 5.4). These classes are also identified in Bantayanon (Allen, 2022) and other Bisayan languages including ceb (Bunye & Yap, 1971; Tanangkingsing, 2009) and Hiligaynon (Wolfenden, 1971; Zorc, 2004). There is also residual classes of adverbs (Aikhenvald, 2015, p. 168) which modify verbs. The members of this residual class are derivatives or subclasses of particles, nouns, verbs, and adjectives (Velupillai, 2012, pp. 393–394).

5.1 Particles

Particles are free functional morphemes that typically do not take affixes or adpositions (Allen, 2022, pp. 106–107). They typically mark grammatical categories, discourse concerns, or connect two units (Aikhenvald, 2015, p. 202). Unlike nouns, verbs, and adjectives, particles cannot be arguments or predicates, with the exception of pronouns which replaces nouns, verbs, and adjectives. Arguments here refer to the participants of a predicate while predicates indicate the properties, relationships, action, or event of a

 $^{^{26}}$ It is still unclear what causes /h/ to be inserted instead of /?/ and vice versa in Linawis. See Newton (1991, pp. 260–261) for a similar discussion for Cebuano.

clause (Kroeger, 2005, p. 53). Linawis' particles include adpositional, connective, second position (2P), pronominal, terminal, modal, temporal, and interjection particles.

5.1.1 Adpositions and Prominence

Adpositional particles appear before or after the nouns, verbs, or adjectives that they mark. They signal information about the marked unit and their relationship to other units in a clause (Aikhenvald, 2015, pp. 141–142). There are two types of adpositional particles in Linawis: paradigmatic and non-paradigmatic adpositions. The latter can be used with the former and with other non-paradigmatic particles, while only one paradigmatic adposition can be used per phrasal unit (see also paradigmatic and non-paradigmatic verbal derivation in Section 5.3.1).

Paradigmatic adpositions²⁷ primarily determines an argument's grammatical relationship to the predicate but they also determine the definiteness, i.e., identifiability and uniqueness (Aikhenvald, 2015, p. 121), and plurality of the marked units. These adpositions also have different forms depending on whether they are marking human names or not.

There are two broad classes of paradigmatic particles: the PERSONAL which mark the names of human and personified entities (e.g., pet names) and the NONPERSONAL which mark everything else (Baran & Dizon, 2023). The PERSONAL adpositions may be SINGULAR or PLURAL, and NONPERSONAL adpositions may be DEFINITE or INDEFINITE. These classes have different forms depending on the grammatical roles they mark (see Table 9). These adpositions always mark the nouns, verbs, or adjectives that they precede even when these particles appear as replacive enclitic forms which attach to previous particles, nouns, verbs, or adjectives that end in vowels or some consonants.²⁸

Each argument of a clause has a grammatical role they fulfill and these roles indicate the argument's relationship to the predicate. These include the Privileged Syntactic Argument (PSA) or subject which controls and is described by the predicate and the non-PSAs which are non-controlling arguments that complete the predicate's argument structure (see Van Valin, 2023, pp. 116–118). There are also oblique arguments or peripheral arguments that are only required in ditransitive clauses, i.e., clauses with three required arguments (Aikhenvald, 2015, p. 205). Paradigmatic adpositions mark these roles, as in (4).

(4) gi-hátag_{PREDICATE} **sang**_{NON-PSA} puyá_A **ang**_{PSA} candy_U **sa** babáye_{OBL} U-give **NON-PROMINENT** kid **PROMINENT** candy **OBL** WOMAN '(I) think the kid gave the candy to a woman a while ago.'

In verbal clauses, i.e., clauses with verbal predicates, each argument is assigned one of two macroroles: the ACTOR (A) or agentive role or the UNDERGOER (U) or patient-like role (Van Valin, 2023, pp. 107–108). The verbal voice affix agrees with the assigned macro-role of the PSA (see Section 5.3.1).

²⁷These may sometimes be omitted in rapid speech, as in (50).

 $^{^{28}}$ = ng replaces -n and -/?/, =s attaches to all consonants except -s but replaces -/?/, and =y replaces all preceding consonants.

	Prominent	Non-pr	ominent	Oblique	Neutral
		Isolated	Connected		
Definite	ang	sar	n(g)	san(g)	
	=ng	sa	ceb		
		=5	Sceb		
Indefinite		sin(g)		sa	=y
		ဝဠ	ceb	=s	
		=g _{ceb}		s=	
			-	ha _{war?}	
Personal,	si	kan(g)	ni	kan(g)	
Singular	=s	ka	=ng	ka	
0	$hi_{war?}$	kay_{tgl}	0	kay_{tgl}	
Personal,	sila (si)	ila(ng)	nila (ni)	kanila(ng)	
Plural	silas	ila ka	nilang	sa ila(ng)	

Table 9

PROMINENT adpositions mark the PSA, as in (5), but they can also mark definite predicates, as in (6). This syncretism, which is shown for Tagalog in Himmelmann (1991, pp. 15–16), is what lead to the choice of PROMINENT instead of NOMINATIVE, ABSOLUTIVE, OR FOCUS. PROMINENT arguments are always definite.

- (5) may=buwák ang dyága
 EPL=flower рм young.woman
 'The girl has flowers.'
- (6) ang dyága qang may=buwák
 PM young.woman PM EPL=flower
 'The (one who) has flowers (is) the girl.'

NON-PROMINENT adpositions, on the other hand, mark the non-PSA and the GENI-TIVE/POSSESSIVE but not the OBLIQUE. For the GENITIVE/POSSESSIVE, the possessor follows the possessed with the adposition in between the two, as in (7). Some NON-PROMINENT adpositions also have special isolated forms that are used when the possessee is omitted or when the possessor is fronted, as in (8). In some special constructions without PROMINENT marking, NON-PROMINENT adpositions can mark the PSA (see Sections 5.3.2 and 5.3.3). The NON-PROMINENT adpositions can be definite or indefinite, as in (9). In Linawis, INDEFINITE non-PSA can be A, as in (10) (see Section 5.3.1).

(7) putok~putók ang bâbà **sang** doctor_{POSSESSOR} DIMINUTIVE~pop РМ mouth **NPM.DEF** doctor 'The doctor went off (on her).'

- (8) iná=ng ka lólo_{POSSESSOR} lagí byay MED.PM=MOD NPM grandfather VERIFICATIONAL house '(We're talking about) granddad's house, right?'
- (9) o founder **sing** Madridejos_{POSSESSOR} yes founder **NPM.INDF** Madridejos 'Yes, (he is the) founder of Madridejos.'
- (10) ... ma-kúhà sing mga=mananagát ang ísdà ... U.IRR.HPST-take NPM.INDF PL=fisherfolka рм fish
 '... the fisherfolk will get the fish ...'

In addition to the PROMINENT and NON-PROMINENT adpositions, there are also OBLIQUE and NEUTRAL adpositions. The OBLIQUE adpositions mark the OBLIQUE, i.e., the peripheral arguments. OBLIQUE arguments in Linawis are typically beneficiaries or locations. The former are arguments which benefit from the realization of the predicate and the latter are arguments which spatially locate the predicate (Kroeger, 2005, p. 54). The DEFINITE OBLIQUE adposition is only typically used to situate events in time, as in (11).

(11) sang gamáy pa=ko ...
 овс. Def small persistence=1sg.pm
 'When I was still little ...'

The NEUTRAL adposition is a special particle that marks INDEFINITE UNDERGOERS (Santiago, 2019, p. 8). As demonstrated in Baran and Dizon (2023), the NEUTRAL adposition can mark for the INDEFINITE PSA in nominal clauses or clauses with nouns as predicates, as in (12) (see Section 5.2.1); the THEMES, i.e., an entity "which undergoes a change of location or possession, or whose location is being specified" (Kroeger, 2005, p. 54) in EXISTENTIAL-POSSESSIVE-LOCATIVE (EPL) clauses, as in (13) (see Section 5.3.3); as well as the INDEFINITE non-PSAs and in adjectival clauses and other verbal clauses or clauses with adjective and verb predicates respectively, as in (14) (see Section 5.3.1). Only the first two uses of the NEUTRAL marking are common among Bisayan languages (Zorc, 1977, p. 84) while the final one is only attested in the Linawis corpus and possibly in Carabio-Sexon (2007).²⁹ NEUTRAL =*y* in these final two uses alternates with the INDEFINITE NON-PROMINENT adposition.

(12) dámò ma=y búnga many EXPLANATORY=NEUT fruit '(There's) a lot of fruit.'

- $\begin{array}{cccc} (i) & \dots & maka-kuha & na=y(?) & isda_{\text{undergoer}} & \dots \\ & & \text{a.irr.hpst-take transformative=nt}(?) & fish \end{array}$
 - '... we would get the fishes ...'

²⁹The following possible use of the NEUTRAL =y as a non-theme undergoer in Binantayan is found in Carabio-Sexon (2007, p. 168).

- (13) wa=y bató NEG.EPL=NEUT rock 'There are no rocks.'
- (14) na-mínyò man=to=sya=y taga-Atop-atop U.REAL-marry EXPLANATORY=DIST.PM=3sG.PM=NEUT from-Atop-atop 'He got married to (someone) from Atop-atop, Bantayan.'

In addition to paradigmatic adpositions, there are also non-paradigmatic adpositions which provide grammatical or semantic information about the marked unit besides grammatical role and/or definiteness. One common example is *mga* which either marks NON-PERSONAL nouns as PLURAL, as in (15), or marks quantities as ESTIMATES, as in (16).

- (15) sín-o ni nga mga=irô who рм.DIST мод PL=dog 'Who(se) dogs are these?'
- (16) **mga**=pilá pa=lang=sya ka búwan **ESTIMATE**=few PERSISTENCE=LIMITING=3SG.PM COUNT month '(It's) only been a few months since he (became mayor).'

A list of non-paradigmatic adpositions identified in the Linawis corpus is provided in Table 10.

Table 10

Form	Function	Notes
=kapin	OR.MORE	This is used with numerals.
ala=, alas=	HOUR This former is used with <i>úna</i> 'one' an sometimes with <i>saís/says</i> 'six' and <i>sya</i> 'seven'.	
bahin=	REGARDING	This is used before obliques.
halin=, gikan= _{ceb?}	SOURCE	This is used before obliques and locatives.
halos=	ALMOST	
hangtod=	UNTIL	This is used before obliques.
hasta=	INCLUDING	This is used before paradigmatic adpositions.
ka=	HONORIFIC	This is only used with human names.
kaysa=	THAN.COMPARATIVE	
mas=	MORE.COMPARATIVE	
may=	EPL	
may=	NEAR	This is used with locations.

Linawis Non-paradigmatic Particles

Form	Function	Notes
medyo=	SOMEWHAT	
mga=	ESTIMATE	This is used with numerals and <i>pilá</i> 'few'.
mga=	PLURAL	This is always attached to nouns directly.
nunot=, tungod=, gumikan=	CAUSE	This is used before obliques.
para=	BENEFACTIVE	This is used before obliques and attached to beneficiaries, i.e., "entities for whose benefit an action is performed" (Kroeger, 2005, p. 54).
para=	PURPOSIVE	This is used before locatives.
puros=	ENTIRELY	
subong=	SIMILATIVE	This is used before obliques. Similatives convey likeness (Matthews, 2007) (see Sections 5.1.4 and 5.1.6).
taga=, kada= _{spa}	EACH/EVERY	

5.1.2 Connectives

Connectives link clauses and/or phrases (Aikhenvald, 2015, p. 99). Linawis has two types of connectives: phrasal (Table 11) and clausal connectives (Table 12).

Table 11

Iuvic I	-	
Linawis	Phrasal	Connectives

Form	Function	Notes	
apán, peró _{spa}	HOWEVER	This can also be used to connect clauses.	
i/=y	AND	These connect two Spanish numerals or introduce a Spanish numeral modifier, e.g alas-dóse i médya 'twelve o'clock and a half or tráyntay dos 'thirty one'.	
ka	COUNT	This follows numerals.	
kag, ug/=g _{ceb}	AND		
nga/=n(g)	INTENSIFIER	An example is <i>mogamáy nga mogamáy</i> 'will get smaller and smaller' (cf. tgl intensifier <i>nga</i>).	
nga/=n(g)	MODIFIER	This introduces modifiers and modifier phrases/clauses.	
0	OR		

Phrasal connectives typically link parts of a phrase, as in (17). On the other hand, clausal connectives link clauses, as in (18).³⁰

³⁰The clausal connective and the second clause may be placed before the former first clause.

Table 12

Linawis Clausal Connectives

Form	Function	
sámtang	WHILE	
kun(g)	CONDITIONAL	
humán, tápos, ántes	AFTER	
(ú)nyà, nyan, tápos, dáyon/láyon, dasón	THEN	
úsà	BEFORE	
sunód	NEXT	
kay	RATIONALE	
ímbes	INSTEAD.OF	
áron, pará _{spa}	SO.THAT	
sukád	EVER.SINCE	
(kún)dì, tì _{hil?}	THUS	
balé	IN.OTHER.WORDS	
totál	ANYWAYS	
bastá	AS.LONG.AS	

- (17) lawm nga Bisayâdeep MOD Linawis'sophisticated Linawis'
- (18) sabun-Ø-án nímo **dasón** ig-dugô ... soap-u.irr-appl 2sg. NPM **THEN** TIMEFRAME.IRR-blood 'You wash (it) with soap, then, when it bleeds ...'

5.1.3 Second Position Particles

Second position (2P) particles are found in the second position of a clause (Tanangkingsing, 2013, pp. 222–223).³¹ For example, TRANSFORMATIVE *na* and THIRD PERSON *sya*, as in (19), move after NEGATIVE *di* is added, as in (20). That said, 2P particles may also be found in the post-nominal, adjunct, terminal, and isolated positions for scoping or emphasis by transposition or doubling, as in (21) (Baran, 2023a, pp. 5–7).

(19) mu-karí **na=syá**=y Lawís A.IRR.PFV-gO.PROX **TRANSFORMATIVE=3sG.PM**=NEUT Madridejos 'They will be coming to Madridejos.'

³¹See Baran (2023a, 2023d) for a more detailed discussion on Linawis 2P particles.

- Baran
- (20) dì **na=sya** mu-karí sing Lawís NEG **TRANSFORMATIVE=3SG.PM** A.IRR.PFV-gO.PROX NPM.INDF Madridejos 'They will no longer come to Madridejos.'

2P particles are either discourse or pronominal particles. The former highlights pragmatic concerns, e.g., stance, evidentiality, quality/quantity, but may also have grammatical implications, e.g., aspect and mode. See Section 5.1.4 for the latter. The 34 2P particles identified in the Linawis particles are listed in Table 13 arranged according to decreasing frequency as in Baran (2023a).

Table 13

Form	Variants	Gloss	Function
man	mang ma m=	EXPLANATORY	This particle is used when adding explanations or context which hearers are presumed not to know (cf. akl <i>man</i> 'ANSWERING' in Zorc, 1970, p. 1) (see also Allen, 2022, p. 108).
na	n=	TRANSFORMATIVE	This particle is used to show an expected and immediate change (cf. _{ceb} <i>na</i> 'already') (see also Allen, 2022, pp. 107–108).
lang	là _{war?} l=	LIMITING	This particle is used to indicate that something is only a limited set within a larger set (cf. war <i>la</i> 'only' in Oyzon et al., 2013, p. 47).
gayód	dyod _{ceb} gyod gayd gad _{war} gid _{hil} g=	ASSURANCE	This particle emphasizes something as irrefutable without a reasonable doubt, whether or not it actually is factually irrefutable (cf. Proto-Bisayan *gayod 'EMPHATIC' in Zorc, 1977, p. 305).
lat	lat sad _{ceb} pod _{ceb} man _{hil}	RELATIONAL	This particle shows sameness and relatedness (cf. prh <i>lat</i> 'also' in Santiago, 2018).
ра	p=	PERSISTENCE	This particle shows that a state/event/action has persisted despite contrary expectations (cf. ceb <i>pa</i> 'yet') (see also Allen, 2022, p. 108).

Linawis Second Position Particles

Form	Variants	Gloss	Function	
gà	ngánì gánì gálì gày	PERSUASIVE	This particle is used when persuading hearers to take the same stance as the speaker (cf. ceb <i>gani/gali</i> 'PERSUASIVE') (se also Allen, 2022, p. 107).	
sang-úna	saúna _{ceb}	ANTERIOR	This particle contextualizes an event as having occurred in a distant past (cf. hil <i>sang-una</i> 'before').	
sarâ	karón _{ceb} arón _{ceb} subóng _{hi1}	RECENT	This particle shows that something is true now and the moments shortly before and after (cf. prh <i>sara</i> 'now').	
kaáyo	pag-áyo kaáy káyo kay	INTENSIFYING	This particle emphasizes or intensifies something much like eng <i>very</i> (cf. ceb <i>kaa</i> , 'very').	
kunó		REPORTATIVE	This particle indicates second hand information or hearsay and is also used to make requests (see also Allen, 2022, p. 10	
bayâ	byâ	FACTUAL	This particle indicates that something is common fact (cf. ceb <i>baya</i> 'wEAK ASSERTION in Tanangkingsing, 2013, p. 224).	
lagí		VERIFICATORY	This particle is used to verify previous claims (cf. ceb <i>lagi</i> 'intensifier of persuasion' in Tanangkingsing, 2013, pp. 236–238).	
da	ra _{ceb} d= r=	RESTRICTIVE	This particle indicates that a set is the complete set, nothing more and nothing less (see also Allen, 2022, p. 107).	
god		ASSERTIVE	This particle is used to assert and correct disbelief (cf. ceb <i>god</i> 'indeed' in Bunye ar Yap, 1971, p. 60).	
ngáy-an	gáy-an ngay(n) gay(n) ngáay diáy _{ceb}	MIRATIVE	This particle shows surprise or lack of knowledge about something (cf. tgl <i>pala</i> 'MIRATIVE' in AnderBois, 2023).	
ba	b=	CONFIRMATORY	This particle is used in confirmations, whether in questioning or answering (see also Allen, 2022, p. 107). This is different from the terminal particle <i>ba</i> (see Section 5.1.5).	
gihápon	gyápon	INVARIANT	This particle indicates an unchanging stator or a persisting action despite an intervening event or despite the passing of time (cf. c gihapon 'still').	

Form	Variants	Gloss	Function	
tingáli	tingáy (si)gúro _{spa}	DUBITATIVE	This particle is used to express doubt or uncertainty (cf. ceb <i>tingali/tingay</i> 'mayb	
kúntà	úntà _{ceb} tánì _{hi1} tà	HYPOTHETICAL	This particle is used to show desire for something to happen or to show that an event has yet to happen (cf. akl <i>kunta</i> 'strong hope, desire, wish' in Salas Reyes et al., 1969, p. 149).	
dáyon	láyon dayn	IMMEDIATE	This particle is used to show that an event immediately occurs after a prior event (cf ceb <i>dayon</i> 'immediately').	
daw	law	QUOTATIVE	This particle is used in quoting (cf. tgl <i>du</i> 'they say'). This particle can be used with <i>kuno</i> 'REPORTATIVE'.	
hinúon	hinón nuón non	CONTRASTIVE	This particle highlights the contrast between the current option and an alternative (cf. ceb <i>hinuon</i> 'instead, anyways' in Wolff, 1972).	
ánay	usâ _{ceb} sà _{ceb}	PREPARATIVE	This particle is used to show that an ever or action is preemptively done before another event or action (cf. hil <i>anay</i> 'way (see also Allen, 2022, p. 107).	
balitáw	bitáw	DUPLICATIVE	This particle makes an unnoticed similarias salient (cf. ceb <i>bitaw</i> 'I agree').	
intáwon	intáwn táw(o)n	FATALISTIC	This particle is used to indicate that the speaker does not think something is a goo thing but that they are unable to do anything about it (cf. ceb <i>intawon</i> 'PITY, HUMILITY' in Wolff, 1972).	
abí	=abí	PERFORMATIVE	This particle is used when informing the hearer that something is unpleasant or th something is not yet known to them (cf. al <i>abi</i> 'EXCUSES, EXPLANATION' in Salas Reyes et al., 1969, p. 44) (see also Allen, 2022, p. 107).	
uróy		CONTEMPTUOUS	This particle shows contempt (cf. ceb <i>uroy</i> 'contempt' in Wolff, 1972).	
áyhan	=áyhan k(ah)â _{ceb}	DELIBERATIVE	This particle is used when deliberating over a rhetorical question (cf. hil <i>ayhan</i> 'perhaps, therefore' in Motus, 1971, p. 17).	
ya		EMPHATIC	This particle is used for emphasis (cf. hil ı́ 'ємрнатіс'). More data is needed.	

Form	Variants	Gloss	Function
nyan		PROSPECTIVE	This particle mark something as an expected future event or action (cf. prh <i>nyan</i> 'soon'). More data is needed.
dáan	ngadáan _{hi1?}	ORIGINAL	This particle shows that the current state is identical to the original state (cf. ceb <i>daan</i> 'already, still the same').
bahín		IMPROBABLE	This particle shows that the scenarios in rhetorical questions are unlikely to be true. More data is needed.
túod		AFFIRMATIVE	This particle marks a statement as being irrefutable on the basis of previous lines. More data is needed.

2P particles always make clitic clusters (19–21) which typically have ultimate stress and typically follow an ascending syllable/phoneme number ordering and descending frequency order in the same weight bracket (Baran, 2023a, pp. 5–7). Some particles have replacive proclitic forms, e.g., ASSURANCE *gayod*, as in (22), in clusters with NON-PERSONAL pronominals. Another Bisayan language with this phenomenon is Porohanon (V. C. A. Santiago, personal communication, 2022).

(22) ngáno_{ceb} g=ádto=ng n-ag-three-months akó
 why ASSURANCE=DIST.PM=MOD A.REAL.IPFV-CONT-three-months 1sG.PM
 dídto ?
 DIST.LOC
 'Why did I even spend three months there?'

5.1.4 Pronouns

Pronouns refer to previously mentioned or contextually salient referents (Velupillai, 2012, pp. 133–141). There are multiple types in Linawis. PERSONAL pronouns form the largest class and distinguish three social deictic distinctions plus compound pronouns combining the 1. NPM and 2.PM (see Table 14).³² They can be SINGULAR OF PLURAL. The 1PL has a clusivity distinction: EXCLUSIVE, i.e., excluding the hearer; and INCLUSIVE, i.e., including the hearer.

Except for the compound pronouns, each pronoun has PROMINENT, NON-PROMINENT, and OBLIQUE forms. The first has long and short forms, as in (23), with the former used in both isolated and 2P positions and the latter only in 2P; while the second has isolated and connected forms, as in (24), with the latter appearing in both isolated and pre-word positions and the latter only in 2P. The compound 1sg. NPM > 2sg.PM form only appears in 2P. Although long and short forms and isolated and connected forms

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³²Contrary to Lobel (2013, p. 122), Linawis exhibits compound pronouns. Whether or not these compound pronouns are borrowed is unclear.

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	Prom	Prominent		Non-prominent	
	Long	Short	Isolated	Connected	
sg 1	akó	ku	ákon	nákon	
	$ak_{war?}$	ta	ak _{war?} ákò _{ceb} akóa _{ceb}	ko	
2	ikáw	ka	ímo im _{war?} imóha _{ceb?}	mo	
1sg. npm > 2sg.pm	1	t	kitá iká aká		
3	s(i)yá	íya iyáha _{ceb?}	n(í)ya	
pl ^a 1 excl	kamí	mi	ámon am _{war?} àmò _{ceb} amó(a) _{ceb}	námon	
INCL	kitá	ta kit _{war?}	áton átò _{ceb} ató(a) _{ceb}	náton ta	
2	kamó	mo	ínyo inyóha _{ceb?}	niínyo nyo	
1sg. npm; 2pl.pm		ta	amó		
3	si	lá	íla iláha _{ceb?}	níla	

Table 14

Linawis Prominent and Non-prominent Personal Pronouns

^a A combination of *ni*/=*ng* plus human names are used after PLURAL personal pronouns to specify the salient members, e.g., *siláng pápa* 'dad and them'.

are interchangeable, a cursory examination of pronominal frequencies in the corpus shows that Linawis prefers long and connected forms except for the short form *ka* which is overwhelmingly preferred over the long form *qikáw*.

- (23) l<ingm>ísò akó/ko turn.around<a.real.pfv.remote> 1sg.pm 'I turned around.'
- (24) **ákon** mga=anák / mga=anák **nákon 1sg. NPM** PL=kin PL=kin **1sg. NPM** 'my children'

Unlike the PROMINENT and NON-PROMINENT PERSONAL pronouns, OBLIQUE PERSONAL pronouns are not 2P. There are two types in free variation: the *sa*-forms, which are compounds of *sa* and the isolated NON-PROMINENT forms; and the *ka*/*ni*-forms, which are compounds of *ka* and the connected NON-PROMINENT forms (see Table 15).

Table 15

Linawis Oblique Personal Pronouns

			sa-form	<i>ka/ni-</i> form
SG	1		sa ákon sákon	(ka)nákon kángkon
	2		sa ímo sa ímoha _{ceb?} símo	(ka)nímo
	3		sa íya s(í)ya	(ka)níya
PL	1	EXCL	sa ámon sámon	(ka)námon
		INCL	sa át(on) sa átờ sa ató(a) _{ceb} sáton	(ka)náton
	2		sa ínyo sínyo	(ka)nínyo
	3		sa íla síla sa iláha _{ceb?}	(ka)níla

In addition to PERSONAL pronouns, Linawis also has NON-PERSONAL pronouns which primarily distinguish three spatial deictic distinctions: PROXIMAL (near the speaker), MEDIAL (near the hearer or near both the hearer and speaker), and DISTAL (far from both the speaker and hearer). Only the PROMINENT class of NON-PERSONAL pronouns has long and short forms. The NON-PROMINENT and OBLIQUE have the same forms (see Table 16).

In addition to the three spatial deictic forms, there is also a CONCEPTUAL NON-PERSONAL pronominal form that is often not used to refer to objects but to ongoing events, concepts, or topics, as in (25) (cf. war *iton* "used to state a fact that could only be true at the moment of speaking" [Oyzon et al., 2013, p. 37]).

(25) sus ! gi-COVID ngay=itón Jesus U.REAL.PFV-COVID MIRATIVE=CONCEPTUAL.PM 'Jesus! She ended up getting COVID.'

Both PERSONAL and NON-PERSONAL pronouns can refer to PERSONAL OF NON-PERSONAL referents. The former is used when social deixis is more salient than spatial deixis and vice versa for the latter. The third person pronouns may be used with NON-PERSONAL pronouns (see Section 6.2).

Table 16

Linawis Non-personal Pronouns

	Prominent		Non- prominent	Oblique
	Long	Short		
Conceptual	itón		sitón	
Proximal	iní	ni	si	ní
Medial	inâ	nâ	sir	nâ
Distal	ádto ató	to	sác sa	

Linawis also has SIMILATIVES (see Section 5.1.6) and SIMILATIVE pronouns, as in (26). They convey likeness (Matthews, 2007) (cf. tgl *parang* 'like').

(26) ... singgán-Ø-on súbong=sinâ say-u.irr-pr.cpv similative=med.pm '... say (something) like that.'

SIMILATIVE pronouns can have their own forms or are formed through the combination of SIMILATIVE $s\hat{u}bong$ = and NON-PROMINENT NON-PERSONAL forms (see Table 17). The former forms may have $ing\hat{o}n$ -/ing-/qin- prefixes which may be related to ceb SIMILATIVES (see Wolff, 1972).

Table 17

Linawis Similative Pronouns

	a-forms	subung-forms
Proximal	áni	súbong siní
Medial	ánà	súbong sinâ
Distal	ádto	súbong sádto

Linawis also has locative pronouns (see Table 18) with three spatial distinctions. The PROXIMAL (near the hearer) and MEDIAL (near both the hearer and speaker) each have two subtypes: SPECIFIC area and GENERAL vicinity. There are three types of locative pronouns: the DEFINITE, INDEFINITE, and the DIRECTIONAL.³³ The latter type has a meaning akin to eng 'towards'.

Finally, Linawis has INTERROGATIVE or question pronouns (see Table 19). There is no which interrogative and where is used instead. where can be definite, typically used for sources, or indefinite. The Linawis' how pronoun is an irregular stem of what. Some interrogative pronouns procliticize to 2p particles.

³³Compare these to the ceb locatives in Fortis and Fagard (2010, pp. 18–19).

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Table 18

Linawis Locative Pronouns

		Definite	Indefinite	Directional
Proximal	Specific	dirí darâ di _{hi1?}	arí	ngarí
	General	dínhi	ánhi	ngánhi
Medial	Specific	dirâ dihâ dâ _{hi1?}	arâ	ngarâ
	General	dínhâ	ánhà	ngánhà
Distal		dídto	ádto	ngádto

Table 19

Linawis Interrogative Pronouns

Question	Form
who	sín-o, sin=
what	náno, ngáno, na=, anó _{hil}
when	sán-o, kán-o
where.indf/epl	háin, hayn, hay=
where.def	di(í)n
why	ngaá, nga=, ngáno _{ceb}
how	anó
how many	pilá
how much	(tag)pilá

5.1.5 Terminal Particles

Terminal particles, also called sentence-final particles, are always found before a terminal juncture as in (27), at the end of an utterance as in (28), or in isolation as in (29) (Baran, 2023d).³⁴ They highlight or resolve interactional concerns in a conversation, e.g., NEGOTIABILITY, and do not have grammatical implications.

(27) no

ára=y

PROSPECTIVE.ALIGNMENT TERMINAL.JUNCTURE EPL=NEUT m-ag-sitsit~sitsit sa ímo

A.IRR.IPFV-CONT-FREQUENTIVE~hissing 2sg.obl

'Right? Someone will be hissing at you from time to time.'

³⁴See Baran (2023d) for a more detailed discussion on Linawis terminal particles.

- (28) láin lat=ádto mo different RELATIONAL=DIST.PM ESOTERIC 'That (one) is also different, you know!'
 (29) o !
- **presentative** 'See!'

The terminal particles identified in Baran (2023d) for Linawis are summarized in Table 20 according to decreasing frequency.

Table 20

Linawis Terminal Particles

Form	Gloss	Function	
oy	EVOCATIVE	This is used to express the speaker's desire to take the floor and to prompt other interlocutors to react. This may be different from vocative <i>huy/quy</i> .	
ba	RESTRICTIVE NEGOTIABILITY	This is used to express the speaker's light desire to keep the floor but still allowing for minimal participation of other interlocutors for the sake of narrative development. This may also be used to insist something that other interlocutors may not be aware of. This may also be used to introduce a sudden topic shift (cf. jpn <i>sa</i> or ceb <i>ba</i> ; see Baran, 2023c).	
ay	ERROR	This is used to indicate that the speaker thinks that what someone, including themselves, said is probably untrue or that they feel bad about the said utterance. This may also be used to show surprise as a mechanism of realizing that what they thought of was actually wrong (cf. MIRATIVE <i>ngáyqan</i>).	
no	PROSPECTIVE ALIGNMENT	This is used to prompt interlocutors to contribute to the same discourse topic or narrative as the speaker. This may be used to introduce new topics related to a previous topic (cf. jpn <i>ne</i> or ceb sa/nu ; see Baran, 2023c).	
(h)a	RETROSPECTIVE ALIGNMENT	This is used to confirm that all the interlocutors are on the same page as the speaker (cf. $ceb ha$).	
o ho _{hil}	PRESENTATIVE	This is used to direct the other interlocutors' attention towards something.	
dibá	VALIDATIONAL	This is used to confirm something in a tag question (cf. tgl <i>dibá</i>).	
bi	REQUEST	This is used to lightly ask another interlocutor to do something (cf. eng tag question <i>won't you</i>) or to focus on an utterance.	
mo	ESOTERIC	This indicates that information is exclusive to the speaker (cf hil <i>mo</i>). More data is still needed.	

Form	Gloss	Function
ayád	ENTIRETY	This shows that an event has been completed in its entirety. More data is still needed.

5.1.6 Modal Particles

Linawis has adverbial modal particles (see Table 21) which appear left of modified nouns, verbs, or clauses. As modals (Aikhenvald, 2015, p. 138), they indicate a speaker's attitudes towards the modified unit. Common examples of adverbial modal particles include the NEGATIVE, as in (30), and the SIMILATIVE, as in (31).

Table 21

Linawis Modal Particles

Form	Function
alang-álang, alangán, a'ng, syémpre	INDUBITABLE
ángay, dápat _{tgl?}	OBLIGATORY
ay(áw)	PROHIBITIVE
básin	WEAK POSSIBILITY
bastá	AS LONG AS
bísan	EVEN IF EVEN WITH
d(11)ì	NEGATIVE
daw, morág _{ceb}	SIMILATIVE
kina(há)nglan, kaylángan	NECESSITY
kunúhay	SUPPOSE
f pwéde/púyde _{spa}	POTENTIAL
pwéde/púyde _{spa} , kasaráng, kaantígo/kantígo	ABILITATIVE
pwéra	NOT UNLESS
síge, pérme _{spa}	CONSTANT
syáro	EXASPERATION
totál	ANYWAY
tungód	CAUSE
urtimó	EVEN UNEXPECTED
usáhay, tyágsa, panyágsa, tágsa, panágsa	INFREQUENT
w(al)â	NEGATIVE EPL

(30) **dì** byay

NEG house

'(This is) not a house.'

(31) ang lúnsod **daw** PM municipality TERMINAL.JUNCTURE **SIMILATIVE** ni-arang~aráng na A.REAL.PFV-DIMINUTIVE~COMPETENT TRANSFORMATIVE '(As for) the municipality, (it) has become a lot better.'

The three NEGATIVE modal particles are the NEGATIVE EPL $w(al)\hat{a}/w\hat{a}$ (see Section 5.3.3), the general NEGATIVE $d(\hat{i}l)\hat{i}/d\hat{i}$, and the NEGATIVE IMPERATIVE $ay(\hat{a}w)$. These particles exhibit NEGATIVE polarities. $W(al)\hat{a}/w\hat{a}$ goes with either REALIS, as in (32), or NON-CONTEMPLATIVE IRREALIS, as in (33), verbs to indicate the NEGATIVE REALIS.

- (32) ... wà kami_A n-ang-ákig sádto ... NEG.EPL 1PL.EXCL.PM A.REAL.IPFV-DISTR-angry DIST. NPM 'We didn't get angry that time ...'
- (33) **wà** ka_u **ma-**hibáw **NEG.EPL** 2sg.pm **U.IRR.HPST-**know 'You didn't know?'

D(il)i/di goes with contemplative irrealis verbs to indicate the negative irrealis or negative cohortative, as in (34). D(il)i/di also goes with nouns to indicate a negative description, as in (30).

(34) **dì m-ang-**ádto ha **NEG A.IRR.IPFV-DISTR-**gO RETROSPECTIVE.ALIGNMENT '(I implore you,) do not go.'

 $Ay(\dot{a}w)$ goes with imperatives to indicate the prohibitive. $Ay(\dot{a}w)$ is typically used like the predicate of a verb complex and takes a non-prominent $sing/og_{ceb}/=g_{ceb}$ marked verbal argument, as in (35).³⁵

(35) **ay** la=g pa-lapít **PROHIBITIVE** LIMITING= **NPM.INDF** CAUSATIVE-near 'Just don't go near (it).'

5.1.7 Temporal Particles

Linawis has adverbial temporal particles which appear to the left or right of clauses (see Table 22).

As temporals (Allen, 2022, p. 116), they locate the event of a clause in time, as in (36).

(36) m-anag-húkas

 A.IRR.IPFV-PL.SIMULTANEOUS-UNCLAD
 pa=man=gà=kamí
 persistence=explanatory=persuasive=1pl.excl.pm
 BEFORE
 'We were even unclad back then.'

³⁵The same is true for *bastá*, *básin*, *bísan*, and *síge*.

Table 22

Linawis Temporal Particles

Form	Function
bwas	TOMORROW
kákyop/kakyóp	YESTERDAY
kalína	A WHILE AGO
nyan, (qú)nyà _{ceb}	IN A WHILE
puhón	SOON
san(g)-úna, saúna _{ceb}	BEFORE
sarâ, karón _{ceb} , subóng _{hil}	TODAY/NOW
sunód (period)	NEXT (PERIOD)
taudtaód	LATER

5.1.8 Interjections

Interjections are extra-clausal units which typically have reaction functions (Aikhenvald, 2015, pp. 98–100). Linawis also has interjection particles with reaction functions, e.g., *wa* 'DISBELIEF'. Some interjections, however, have additional discourse navigating functions such as $t\hat{a}$ which has a discourse resumptive function, as in (37).

(37)	tà	na-agi-án	man=nínyo	
	RESUMPTIVE	$u.real. {\it Hpst-pass-partitive}$	explanatory=2pl.	NPM
	'As I was saying, you passed by (it)!'			

Some interjection particles which were identified in the Linawis corpus are listed in Table 23.

Table 23

Linawis Interjectional Particles

Form	Gloss	Notes
o(o), ng	AFFIRMATIVE	This is equivalent to eng yes.
d(íl)ì	NEGATIVE	This is equivalent to eng <i>no</i> .
(si)gí	AGREEMENT	This is quivalent to eng <i>okay</i> .
(h)oy	VOCATIVE	This is not to be confused with EVOCATIVE <i>quy</i> .
SÌ	DETERRENT	This is used to shoo animals (particularly dogs) away.
(ha)lá	EXCLAMATION	
(há)hay	RESIGNMENT	
agóy	CONDOLENT	

Baran

Form	Gloss	Notes
agáy	DISTRESS	This may be used for metaphorical pain.
sang, wa	DISBELIEF	
(he)sús, maryósep, pastilán, pískot, pesté, péstoy, átay, átod, yátak, yáwà	PROFANITY	These are not synonymous but are grouped together here for convenience.
simbakó	FORESTALLING	Compare this with ceb <i>simbakú</i> 'may it not happen to me' (Wolff, 1972).
(p(w)éra)buyág	WARDING OFF	Compare this with eng <i>jinx</i> or deu <i>Gesundheit</i> .
iníng, ináng	WORD-SEARCH/ HESITATION	Compare this with ceb <i>kanáng</i> (Tanangkingsing, 2023).
tà/ta	RESUMPTIVE	
na	UNDERSCORING	
aw	REPAIR	See Tanangkingsing (2009, p. 568).
a	INTERRUPTION	Compare this with eng <i>ah</i> and <i>um</i> .

5.2 Nouns

Nouns describe objects or referents whether they are abstract or not (Velupillai, 2012, p. 122). They typically as function verbal arguments (Aikhenvald, 2015, p. 103) but they may also function as the predicates of intransitive clauses, i.e., clauses with only one core argument (Aikhenvald, 2015, p. 95). In Linawis, nouns can modify other nouns, as in (38), and can also be the intransitive predicates of clauses, as in (39). Nouns can be bare roots, e.g., numerals, names, etc., or derived from nouns, verbs, or adjectives through adpositional or nominal affixation.

- (38) Gmelina nga tanóm Gmelina мор plant 'a plant (called) Gmelina'
- (39) **si tíyà** lang=úntà=to ang survivor **PM aunt** LIMITING=HYPOTHETICAL=DIST.PM PM survivor 'Auntie should have been the sole survivor.'

5.2.1 Nominal Derivation and Adverbial Nouns

Linawis nouns can be derived from nouns, verbs, and adjectives through adpositional marking, as in (40) (cf. Tagalog in Himmelmann, 1991, pp. 6–25). Nominals formed through adpositional marking can be interpreted as adverbs in verb complexes which involve a verbal predicate and an adverbial argument, as in (41) (see Section 5.3.5). Nouns can also be derived from nouns, verbs, and adjectives through nominal affixation and suprafixing, as in (42).

- (40) **ang** na-hi-bilín **PM** U.REAL.HPST-AESTHETIC-leave.behind 'the (ones) left behind'
- (41) m-ang-utang sing d<in>á<g>kò A.IRR.IPFV-DISTR-debt INDF. NPM <MANNER>big<PL> 'borrow (money) in huge (amounts)'
- (42) kuhâ sang mana~nagát take\product NPM.DEF DOER~sea '(the) fisherfolk's catch'

A list of some nominal derivation strategies identified in Linawis are listed in Table 24.

Table 24

Linawis Nominal Derivation

Form	Function	Example
-((V)r)a	FEMININE	<i>doktóra</i> 'female doctor' (from <i>doktór</i> 'doctor')
-((V)r)o	MASCULINE	hilóngg o 'man from Iloilo'
-(an)án	LOCUS	<i>sakyanán '</i> vehicle' (from <i>sakáy</i> 'ride')
(pag)ka-	QUALITY	<i>kalisód</i> 'difficulty' (from <i>lisód</i> 'difficult')
<um></um>	FOSSILIZED	g um íkan 'CAUSE' (from gíkan 'from')
-ang	NICKNAME	Vívy ang (from Vivian)
Cu~	DIMINUTIVE	<i>ku</i> kamálig 'hut-like' (from <i>kamálig '</i> hut')
hiN- haN-	FOSSILIZED	<i>hinúmdom</i> 'remember' (from <i>dúmdum</i> 'remember')
-inán	RESULT	s in ulti án ' language' (from <i>súlti '</i> speak')
-íng	NICKNAME	Jol íng (from Joliana)
ka-	CO-	<i>kaúpod</i> 'companion' (from <i>upód</i> 'accompany')
ka(h)an	COLLECTIVE	<i>kalabánan</i> 'majority' (from <i>lában</i> 'most')
maNay	DOER.HABITUAL.PL	<i>manganákay</i> 'those who give birth' (from <i>anák</i> 'kin')

Form	Function	Example
maN-CV~	DOER.OBLIGED	<i>mananagát '</i> fisherfolk/seafarer' (from <i>dágat '</i> sea')
manog-	DOER.OBLIGED	<i>manogdúslak '</i> bayonet user' (from <i>dúslak '</i> stab')
pa-	CAUSATIVE	<i>pa</i> dáyon 'go on' (from <i>dayún</i> 'continue')
paN-	DISTRIBUTIVE	<i>pangítà</i> 'find' (from <i>kitáq</i> 'see')
paNon	ACTIVITY	<i>pangisdáon</i> 'fishing' (from <i>ísdà</i> 'fish')
pani-	EATING TIME	<i>paniúdto</i> 'lunch(time)' (from <i>údto</i> 'noon')
ROOT~	DIMINUTIVE	<i>dyagan-dyagán '</i> run aimlessly' (from <i>dyágan '</i> run')
SPECIAL FORMS	NICKNAME	<i>Gágà</i> (replaces names as different as <i>Emily</i> or <i>Arlene</i>)
Stress shift to penultima	ADVERBIALIZER	<i>hápit</i> 'almost' (from <i>hapít</i> 'drop by')
Stress shift to penultima	PROCESS	<i>míngaw</i> 'lonely' (from <i>mingáw</i> 'to miss someone')
Stress shift to ultima	PRODUCT	<i>kuhû 'the catch' (from <i>kúhà</i> 'take')</i>
tag-	EVERY	<i>tag-</i> tungang-gáb-i 'every midnight' (from <i>tungang-gáb-i</i> 'midnight')
taga-	FROM	<i>taga-Malbago '</i> Malbago resident' (from <i>Malbago '</i> Barangay Malbago')
ti-	FOSSILIZED	<i>tibuók</i> 'whole' (from <i>buqúk</i> 'whole')
tig- tag(a)-	DOER.HABITUAL	<i>tig</i> kaón 'habitual eater' (from <i>káon</i> 'eat')
tig- ting- _{ceb?}	TIME PERIOD	<i>tig</i> quwán 'rainy season' (from <i>uwán</i> 'rain')
V~ <l> -un</l>	INTENDED	q il ímn on 'alcohol' (from <i>inóm</i> 'drink')

5.2.2 Plurals and Numerals

Aside from plural *mga*, some nouns can take the co-plural *mag-*, as in (43), or the collective plural *ka--an*, as in (44). The latter may derive seemingly unrelated concepts, e.g., *lihok* 'move' > *kalihókan* 'activity', that is, a collection of movements.

- (43) kay **mag-**útod tingáli RATIONALE **PL-**sibling DUBITATIVE 'Maybe, (it's) because (we're) siblings.'
- (44) enrollment na=lat=ba sang enrollment transformative=relational=confirmatory NPM.def ka-puya-hán collective-kid-circumfix '(It's) the kids' enrollment (time) again'

To be specific, speakers use native numerals and the COUNTING ka = to count items, as in (45), and the MODIFIER *nga* with Spanish numerals or the native hundred/thousand to discuss prices or time, as in (46). For prices, worth *tag*- is also used; for specifying quantity for each person, root reduplication is done. When specifying the ORDINAL, *ika*-is attached to numerals, as in (47). For 'first', the suppletive *qúna* is used.

- (45) **waw'** ka customer **eight** COUNTING customer 'eight customers'
- (46) chicharón nga **tag-síngko** pork.rind мор **wortн-five** 'pork rinds worth five (pesos)'
- (47) pag-**ika-duhá** nga béses ... TIMEFRAME-**ORDINAL-two** MOD instance 'By the second instance, ...'

The numerals used in Linawis are listed in Table 25.

Table 25

Linawis Numerals

English	Indigenous	Spanish
one	us(á) isá _{tgl?} úna 'first (hour)'	uno péso 'one peso'
two	duhá	dos
three	tyo ^{†,a} tuló _{ceb}	tres
four	upát	kwátro
five	limá	síngko
six	unóm	saís says
seven	pitó	syéte

English	Indigenous	Spanish
eight	waw'	ótso
nine	syam	núybe
ten		dyes díse- ^b
eleven		ónse
twelve		dóse
thirteen		trése
fourteen		kínse
twenty		báynte
thirty		tráynta
forty		kwarínta
fifty		singkwénta
sixty		saysénta
seventy		siténta
eighty		otsénta
ninety		nobénta
hundred	gatós	syen
thousand	líbo	mil

^a Although some language partners are more likely to say *tyo* when asked for the translation of 'three' (Baran, 2022, p. 112), *tuló* from Cebuano is the only form that appears in the available Linawis corpus.

^b Added to the Spanish numerals six to nine to derive the numbers sixteen to nineteen, e.g., *disesyéte* 'seventeen'.

5.2.3 Honorifics, Titles, and Vocatives

Linawis has a semi-obligatory respect system. When referring to people of equal rank (e.g., similar age) in the third person, the HONORIFIC ka = is used,³⁶ but with those of different ranks (e.g., senior/junior), the TITLE form of an honorific is attached to names, as in (48). Linawis TITLE forms are reduced monosyllable forms of HONORIFICS or names. Typically, this involves the deletion of segment(s) in the penultima, as in (49).

- (48) dirí pa=gayd si ka=Bobby ! PROX.LOC.DEF PERSISTENCE=ASSURANCE PM HONORIFIC=Bobby 'Bobby was even here!'
- (49) ánà silá=ng t(i)yà=Letty say 3pl.pm= NPM TITLE\aunt=Letty 'or so say Aunt Letty and the others'

³⁶The language partner *Nang* Mariah Sherianne comments that ka = now sounds archaic and is being avoided by younger speakers due to associations with militant groups who use a similar honorific.

Some common honorific forming strategies in Linawis are listed in Table 26.

Form	Function	Notes
(dó)dong	younger man	
(láng)gà	dear	This can be used towards a younger person which one is not necessarily intimate towards.
(ló)lo	grandfather	
(lól)a	grandmother	
(má)ma _{spa}	mother	In the third person <i>, amáy</i> or <i>amahán</i> _{ceb} are typically used.
(má)nang	older woman	
(má)nong	older man	
(pá)pa _{spa}	father	In the third person <i>, ilóy</i> or <i>inahán</i> ceb are typically used.
(qín)day	younger woman	
(sé)nyor	VENERABLE	This is typically used for male saints and with san
doktór doktóra	doctor	
kapitán	captain	
mam _{eng}	older woman	This is used in more formal settings and cannot be used to refer to an older sibling.
máre	friend (woman)	
mayór	mayor	
pare	friend (man)	
san	saint	
sir _{eng}	older man	This is used in more formal settings and cannot be used to refer to an older sibling.
$t(i)y\dot{a}_{spa}$	aunt	
$t(i)y \grave{o}_{\text{spa}}$	uncle	
tatà	aunt/uncle	This is gender-neutral.

Table 26

Linawis Honorific Derivation

In the SECOND PERSON, either the TITLE form with or without the name, as in (50), or the vocative form, as in (51), is used.³⁷ Linawis vocative formation involves stress shift to the ultima, e.g., *lánggà* > *langgâ* 'dear'. This vocative formation is shared with Cebuano (Baran, 2023b, pp. 24–25) and Waray (Anonymous,³⁸ personal communication, 2023).

³⁷You are almost always referred to by a nickname if you have one.

³⁸A Waray (Inland Samar variety)-speaking friend who requests to remain anonymous.

- (50) amó lat Ø sinultián námon (láng)gaq PRES RELATIONAL PM language 1PL.INCL. NPM |TITLE|dear 'This is our language, dear.'
- (51) kumústa qikáw **langgáq** how.are.you 2sg.pm **dear\vocative** 'How are you, dear?'

5.3 Verbs

Verbs describe actions, events, processes, or states and are encoded with Tense-Aspect-Mood-Voice (TAMV) (Velupillai, 2012, pp. 123–126).³⁹ These are also true for Linawis verbs. The verbs in Linawis are primarily derived via TAMV affixation, i.e, voice or non-voice derivation, but there are also special classes of bare verbs, e.g., EPLS. Both derived and non-derived verbs function as the predicates of clauses.

5.3.1 Voice Derivation

VOICE derivative affixation is paradigmatic, i.e., only one affix is used per verb (see Payne & Oyzon, 2020, p. 11), and agrees with the macrorole of the PSA which controls and is described by the predicate (see also Section 5.1.1). Each argument is assigned one of two macroroles or generalized semantic roles in clauses with verbal predicates: the ACTOR (A) or the most agentive or active argument and the UNDERGOER (U) or the most patientive or passive argument (see Van Valin, 2023, pp. 107–108). There are eleven voice affixes in Linawis with seven A-affixes and four u-affixes (see Table 27).

Table 27

			Realis	Irrealis ^a	Imperative
Actor	Perfective	Remote	<ingm>[†]/<im> ning-/ming-</im></ingm>	mo- <um>^{†,b}</um>	Ø
		Recent	ni-/mi-		
	Imperfectiv	ve	n-	m-	
	Happensta	ntial	(na)ka-	(ma)ka-	
Undergoer	Perfective		gi- <in>^{†,b}</in>		Ø
	Imperfectiv	ve	gin(g)-		
	Happensta	ntial	na-	ma-	

Linawis Voice Affixes

^a The irrealis (contemplative) is also used to signal the cohortative.

^b This only occurs in some fossilized forms.

³⁹In Tagalog, this is the main criteria for distinguishing verbs (Aikhenvald, 2015, p. 83).

The IMPERATIVE A and IRREALIS U are null-marked.⁴⁰ These affixes are specified for three types of MOOD: the REALIS or the realized action/event/process, as in (52); the IRREALIS or the non-realized action/event/process, as in (53) (Aikhenvald, 2015, pp. 140–141); and the IMPERATIVE or the "directive speech act", as in (54) (Velupillai, 2012, p. 359). These affixes are also specified for three types of ASPECT: the PERFECTIVE or the complete/unsegmentable action/event/process, as in (52); the IMPERFECTIVE or the incomplete/segmentable action/event/process, as in (53) (Velupillai, 2012, p. 209); and the HAPPENSTANTIAL or non-volitional happenings, as in (55) (Payne & Oyzon, 2020, p. 31). The A PERFECTIVE may be further specified as having occurred in the REMOTE, as in (56), or RECENT PAST, as in (52).⁴¹

- (52) **ni-butó** ang apdo **A.REAL.PFV.RECENT-**explode РМ gallbladder 'The gallbladder burst.'
- (53) m-ag-dagóm inâ=silá
 A.IRR.IPFV-CONT-clothing мед.рм=Ззд.рм
 'They wear clothing.'
- (54) dyágan-Ø kamó ! run-**A.IMP** 2pl.pm 'Run!'
- (55) naka-sapíl si Pápa
 A.REAL.HPST-accidentally.brush.onto рм Dad
 'Dad accidentally brushed onto (a mythological creature).'
- (56) s<ingm>unód ma=ko <a.real.pfv.remote>follow explanatory=1sg.pm '(And so,) I followed (the fellow).'

Most voice affixes are regular prefixes except for the IMPERFECTIVE A affixes which are replacive and can only be used with the stem-forming affixes pag(a)-,⁴² paN-,⁴³ panag-, or *pakig*-, as in (57–58); verbals with fossilized pag(a)-, paN-, or *pani*- prefixes, e.g., *paniqúdtu* 'lunch' as in (59); and some AUTO-EXPERIENTIAL ka-forming verbs, like kanáqug 'descend' as in (60).

⁴⁰Following Payne and Oyzon (2020, p. 25), treating the imperative and irrealis u as null-marked allows for an analysis where *-an* and *i*- can specify us for two moods.

⁴¹I originally analyzed these two as interchangeable, but language partners said otherwise. Further verification is needed (cf. war deliberate *nag*- and inevitable $\langle in/um/in(u)m \rangle$ in Payne and Oyzon, 2020, p. 26).

 $^{^{42}}n$ -/*m*- and pag(a)- may be combined as *ga*-, e.g., *n*-*ag*-búhat 'A.REAL.IPFV-CONT-do' > *ga*-buhat 'A.REAL.IPFV.CONT-do'.

 $^{^{43}}$ *n-/m-* and *paN-* may be combined as *N-*, e.g., *n-ang-uhà* 'A.REAL.IPFV-DISTR-take' > *ng-uhà* 'A.REAL.IPFV.DISTR-take'.

- (57) daw n-ag-bu~balíbad
 SIMILATIVE A.REAL.IPFV-CONT-FREQUENTIVE~refuse
 na=to_A ákon bána_A
 TRANSFORMATIVE-DIST.PM1sG. NPM husband
 'My husband had been repeatedly refusing already.'
- (58) kung m-ag-hampang~hampang kamí
 IF A.IRR.IPFV-CONT-DIMINUTIVE~play 1PL.EXCL.PM
 'if we are playing about'
- (59) dídto kamí_A **n**-aniúdto sa íla DIST.LOC 1PL.EXCL.PM**A.REAL.IPFV**-lunch OBL.INDF 3PL. NPM 'We had lunch at their (place).'
- (60) **m-a-**náog kamí_A eskína-Caduman **A.IRR.IPFV-AUTO-**descend 1PL.INCL.PMCORNER-Caduman 'We will go down at the corner by Caduman, Mandaue.'

In addition to voice affixes, there are also non-paradigmatic stem forming affixes (see Table 28) that specify "particular aspects" (see Payne & Oyzon, 2020, p. 3) which are typically kinds of IMPERFECTIVE; although, the CAUSATIVE specifies an additional argument instead. There are two types: those required by some voice affixes (Type 1) and those which are not (Type 2). Type 2 affixes are attached to roots before Type 1 affixes, e.g., *pagbubalibad* 'refusing' and not *pupagbalibad* as in (57). Contrary to Allen (2022, p. 90), Linawis has both productive partial, as in (57), and full reduplication, as in (58).

Finally, there are u specifiers which are exclusive to the non-happenstantial u affixes except for the APPLICATIVE/PARTITIVE (APPL/PART) which can be applied to the HAPPEN-STANTIAL. In ditransitive clause, the u may be primary (pr) or the most patient-like and completely affected u, secondary (sd) or the theme/instrument-like and partially affected u, or APPLICATIVE/PARTITIVE (APPL/PART) or the least affected u and is typically either a partitive patient or a promoted oblique, e.g., beneficiary, recipient, locative (see Haspelmath, 2008, pp. 84–88). u specifiers are affixes which agree with the specific role of the undergoer PSA, i.e., a clause with a primary undergoer PSA will have a pr affix, as in (61); a clause with a secondary undergoer PSA will have an sd affix on the predicate verb predicate verb, as in (62); and a clause with an APPLICATIVE/PARTITIVE PSA will have an APPLICATIVE/PARTITIVE affix on the predicate verb, as in (63).

- (61) ímo gayd=sya_{U.PR} sumpá-Ø-on 2sg. NPM ASSURANCE=3sg.PM curse-u.irr-pr.cpv 'You should curse it.'
- (62) **i-**balígyà-Ø níla Ø íla puyá_{U.SD} **sD-**sell-U.IRR 3PL. NPM **PM 3PL. NPM kin** 'They would sell their children (to us).'

Table 28

Linawis Non-paradigmatic Stem-forming Affixes

	Aspect	Form	Restrictions
Type 1	CONTINUOUS	pag(a)-	Not a.pfv Not hpst Not u.real
	PLURAL.SIMULTANEOUS	panag-	
	COMITATIVE	pakig-	
	DISTRIBUTIVE	paN-	Not a.pfv
Type 2	ITERATIVE	<in></in>	
	RECIPROCAL	-ay	
	DIRECTIONAL	pa(si)-	
	FREQUENTIVE ^a	коот~, Cu~, -l-V~	
	CAUSATIVE	pa-	
	AUTO-EXPERIENTIAL	ka-	Not a.hpst
	MULTIPLICATIVE	ka-	
	PLURAL	<g>,^bsi-</g>	
	DIMINUTIVE	ROOT~	
	AESTHETIC/DISTANTIAL	ha-, hi-	нрят only

^a When the root begins with q, the form $-l-V\sim$ is used; otherwise, $Cu\sim$ is used.

^b Only occurs in one example: *tágbunan* from *tábun* 'to cover'.

(63) taga-Ø-an kitá_{U.APPL}=y panginabuhían give-U.IRR-APPL 2sg. NPM>1sg.PM=NEUT livelihood
 'I'll give you (a source of) livelihood.'

The U specifier affixes are suffixes except for the PRIMARY (PR) and SECONDARY (SD) REALIS which are unmarked and the SD IRREALIS which is a prefix. These suffixes are specified for the specific U-type of the PSA which may be PR, SD, or APPL/PART. These affixes have different forms in the REALIS, the IRREALIS CONTEMPLATIVE, and the NON-CONTEMPLATIVE (see Table 29).

There is also an INTENTIVE ~VC reduplication applied to the CONTEMPLATIVE IRREALIS -*un* and -*an*. This has the effect of making the verb something that needs to be done, e.g., *palit* 'buy' > *palitón* 'to buy something' > *palitónun* 'to be bought'.

Aside from role agreement, Linawis verbals also exhibit negative (see also Section 5.1.6) and counterfactual polarity. The latter requires NON-CONTEMPLATIVE IRREALIS verbs, as in (64).

(64) hay=man kwa-Ø-a ang mangisdáay ay wHERE.INDF=EXPLANATORY take-U.IRR-PR.NCPV PM fisherfolk ERROR 'Where will the fisherfolk go?!'

Table 29

Linawis Undergoer Specifiers

	Realis	Irrealis	
		Contemplative	Non- contemplative
Primary	Ø	-(h)on	-(h)a
Secondary	Ø	i	-
Applicative/Partitive		-(h)an	-(h)i

5.3.2 Non-voice Derivation

There are two non-voice derivative affixes in Linawis. These are the REALIS TIMEFRAME pag(ka)- and the irrealis timeframe inig(ka)-, ig(ka)-, ing-, and ka-. Clauses with time-FRAME affixes are subordinate clauses, as in (65), that act as reference time for the action/ event/process of the main clause verb, i.e., the main clause action/event/process occurs after or during the occurrence of the subordinate action/event/process. These affixes prevent prominent arguments from surfacing, as in (65). The only arguments allowed for non-voice clauses are non-prominent arguments and obliques. In addition to non-voice affixes, non-voice clauses can also be made with meteorological verbs, as in (66).

- (65) observe-Ø ig-humán sinâ=níya ka-lígò
 observe-A.IMP TIMEFRAME.IRR-finish MED.NPM=3sG.NPM AUTO-bathe
 'Observe (what he does) after he takes a bath.'
- (66) n-ag-**uwán** sará=y gamáy A.REAL.IPFV-CONT-**rain** RECENTIVE=NEUT small '(It's) raining a bit'

5.3.3 Existential-Possessives-Locatives and Motion Verbs

EPLS express the existence, the possession, and the location of an argument (Lyons, 1967, p. 390). EPLS are special verbs that form an extension of Linawis' deictic particle system (see Table 30).⁴⁴ They are typically non-affixable, except for the NEGATIVE $w(al)\hat{a}/w\hat{a}$, and are typically intransitive. EPLS always require an UNDERGOER argument that performs the THEME role (Baran & Dizon, 2023).

There are three main types of EPL clauses: the EXISTENTIAL, LOCATIVE, and POSSESSIVE (Lyons, 1967, p. 390). The EXISTENTIAL is formed either with an EPL predicate and a NEUTRAL, INDEFINITE NON-PROMINENT- OF PROMINENT-marked THEME argument, as in (67),⁴⁵ or with the proclitic EPL *may*= and an incorporated THEME argument, as in (68). The LOCATIVE is an EXISTENTIAL clause with an OBLIQUE argument, but in this case the THEME argument cannot be INDEFINITE NON-PROMINENT, as in (69). The POSSESSIVE has an obligatorily NEUTRAL

⁴⁴See Baran and Dizon (2023) for a more detailed discussion on Linawis EPLs.

⁴⁵The GENERAL EPL *may-árà* cannot be used with a prominent argument in the existential and locative (cf. tgl *mayroon*).

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Table 30

Linawis EPL Forms

EPL
ári
árà ná(a) _{ceb}
ádto túa _{ceb}
may= (may=)árà
w(al)â/wà
háin/hayn/hay=

or INDEFINITE NON-PROMINENT THEME argument and an obligatorily prominent possessor argument, as in (70) (Baran & Dizon, 2023, pp. 60–67).

- (67) **ára=y/sing/ang** taw' **EPL=(MED.)EPL=NEUT/NPM.INDF/PM** person 'There's a person.'
- (68) **may=**taw' **EPL=**person 'There's a person.'
- (69) **ádto=y/=ng** taw'**=s** byay **DIST.EPL=NEUT/PM** person**=OBL.INDF** house 'A/the person is in the house.'
- (70) w'a=y/sing buwák=s Adam NEG.EPL=NEUT/NPM.INDF flower=рм Adam 'Adam has no flowers.'

In addition to EPLS, there are also deictic motion verbs which indicate motion towards a specified distance (Fortis & Fagard, 2010, pp. 16–20) that are affixable with voice affixes, as in (71).

(71) m-ag-**k**<in>**arâ** sya kada=board-meeting A.IRR.IPFV-CONT<ITERATIVE>**go.MED** 3sG EVERY=board-meeting 'He goes there every time there is a board meeting.'

There are two types of motion verbs: underived and those derived from directional locatives (see Section 5.1.4) with the *pasi*- stem forming affix (see Table 31).

Table 31

Linawis Motion Verbs

	Underived	Derived
Proximal	karí	pasingarí
Medial	karâ	pasingarâ
Distal	kádto	pasingádto

5.3.4 Irregular Verbs

Linawis has three irregular verb types. These include *nga*-verbs, irregular stems, and the PRESENTATIVE $am o/am = .^{46}$ The first is a set of idiosyncratic verbs that take nga/O marked U. Common ones include $siling/sing/seg on =_{spa}$ 'say' which takes a NON-PROMINENT A, as in (72); $ana^{47}/n =$ 'say' which takes a PROMINENT A, as in (73); $ganahan/gusto_{spa}$ 'want' which takes a PROMINENT A but may have NON-PROMINENT U, as in (74); ambot 'I do not know' which only has an OBLIQUE and a nga/O or kag/og-marked U, as in (75); and $(ka)nakon/kunakon^{48}$ 'I say' which has an incorporated NON-PROMINENT A, as in (76).

- (72) silíng/sing=**nya** nga/Ø say=**3sg.npm MOD** 'He says ...'
- (73) ánà/n=**sya nga** say=**3sg.рм моо** 'He says ...'
- (74) ganáhan/gústo sya=y/sing/sang/nga/Ø
 want 3sG.PM=NEUT/NPM.INDF/NPM.DEF/MOD/MOD
 'She wants (a/to) ...'
- (75) qámbot sádto=sa íya nga/og/Ø I.do.not.know DIST.OBL=3sG.OBL MOD/AND/MOD 'I don't know what's up with her and ...'
- (76) kanákon n**ga/Ø** I.say **мор** 'I said ...'

The second set of irregular verbs behave syntactically like other verbs but have suppletive stems. These suppletive forms are irregular because they cannot be explained by consistent sound changes (see Table 32).

⁴⁶Tanangkingsing (2009, pp. 295–334) considers *nga*-verbs and **presentative** verbs to be types of verb complexes in Cebuano but it is still unclear if the same can be said for Linawis.

⁴⁷Its etymon is probably the medial similative.

⁴⁸This is the oblique first person singular pronoun.

Regular Stem	Irregular Stem	Examples	Notes
silíng/síngg 'to say'	sínggan	singgan-Ø-á say-u.irr-pr.ncpv	<i>síngg</i> is formed by deletion in <i>silíng</i> of the ultima vowe (<i>sílng</i>), then assimilation of
		singgán-Ø-un say-u.irr-pr.ncpv	<i>l</i> to <i>ng</i> (<i>sígng</i>), and then metathesis of <i>g</i> and <i>ng</i> (síngg).
hátag 'give'	tágà	tagá-Ø-an give-u.irr-appl	This possibly arose from ar irregular instance of metathesis.
(pa)sagád 'leave alone'	(pa)ságdà	(pa)sagdáq-Ø-i leave.alone-u.ırr-appl.ncpv	This possibly arose from ar irregular instance of metathesis.
tán-aw 'look'	aw	áw-Ø-a look-u.irr-pr.ncpv	This shows an irregular loss of the first syllable.
náno 'what'	qanó	qán-Ø-hun what-u.irr-pr.ncpv	All derivatives of <i>náno</i> use the irregular stem. Verbalizing <i>náno</i> results in a 'how' interpretation.
qákon 'my' qámon 'our' qáton 'our'	qákò qámò qátò	qako-Ø-on 1sg.npm-u.irr-pr.ncpv	See ceb NON-PROMINENT pronouns in Tanangkingsing (2009, p. 120).

Table 32

Linawis	Irregular	Stem	Verbs
L 1111110010	1110811111	010111	10100

The third irregular verb $am\delta/am=$ is the PRESENTATIVE predicate (cf. ceb $ma\delta$ in Tanangkingsing, 2009, p. 128). It is typically used to present or define a contextually salient referent in which case it has the regular verbal clause structure, as in (77); to present a conclusion in which case it has an irregular clause structure, as in (78); or to show agreement (cf. eng *that's the case*), in which case it is used in isolation (see also Matthews, 2007).

- (77) qam=iní ang Linawís pres=мер.рм рм Madridejos.variety 'This is the Madridejos variety.'
- (78) **amó** lat=ta=Ø n-ag-lális **PRES** RELATIONAL=1PL.INCL.PM=MOD A.REAL.IPFV-CONT-argue 'And that's why we're arguing.'

5.3.5 Verb Complexes and Adverbial Verbs

Verb complexes involve either an adverbial predicate and verbal argument or a verbal predicate and a non-oblique adverbial argument (Tanangkingsing, 2009, pp. 295–334). The semantics of Linawis verbs can be specified through these verb complexes. The verb complex is created by making a verbalized adverb the predicate and turning a main verb into a voiceless NEUTRAL, as in (79), or INDEFINITE NON-PROMINENT argument, as in (80), or an unmarked voiceless verb with only stem-forming affixes, as in (81).

- (79) **na-ún-han** mang=ko=y hátag **U.REAL.HPST-first-APPL** EXPLANATORY=1sG.PM=**NEUT** give '(Someone was able) to give before I could.'
- (80) kung duhá ka ádlaw áko=ng i-sígi-Ø sing conditional two count day 1sg.npm=mod sd-always-u.irr npm.indf puláw burn.midnight.oil

'if I spend two days always burning the midnight oil'

(81) ma-hádlok ka dirí sa kuló pag-labáng U.IRR.HPST-fear 2sg.PM PROX.LOC OBL.INDF breadfruit cont-cross 'You will be afraid (when) crossing (the road) here by the breadfruit (tree).'

Instead of the adverb position (see Section 5.5), an adverbial noun can be incorporated into a verb complex by making it either a predicate modifying an INDEFINITE NON-PROMINENT OR NEUTRAL argument, as in (82), or a predicate with the main verb as the argument, as in (83).

- (82) mo-káon na=sya=y tárong A.IRR.PFV-eat TRANSFORMATIVE=3sg.PM=NEUT proper 'He eats well now.'
- (83) mo-tárong na=syá=y káon A.IRR.PFV-proper TRANSFORMATIVE=3sg.PM=NEUT eat 'He eats well now.'

5.4 Adjectives

Adjectives "state a property" and "further specify a noun's referent" (Aikhenvald, 2015, pp. 157–60; Dixon, 2010, p. 70). In Linawis, adjectives are difficult to distinguish from nouns and verbs, as both nouns (see Section 5.2) and adjectives, as in (84), can further specify another noun's referent with the MODIFIER particle, and both adjectives and EPL verbs can specify a noun's spatial properties (see Section 5.3.3). Tanangkingsing (2009) even considers adjectives as a subclass of verb called stative verbs in his grammar of Cebuano and "it has been suggested that it is impossible or inappropriate to identify an adjective class" (Dixon, 2010, p. 62).

(84) Lawisánon_{NOUN} nga puyá_{NOUN}
 Lawisanon мор kid/child
 'child Lawisanon' or 'Lawisanon kid'

Although Linawis adjectives are difficult to distinguish from nouns and verbs, there are some criteria to distinguish a separate adjective class. These include select morphological and syntactic constructions which are only applicable to adjectives.

5.4.1 Adjectival Derivation

Linawis adjectives can morphologically be identified by which affixes can be used with them. As in Aikhenvald (2015, p. 160) and Dixon (2010, p. 70), adjectives are gradable and can be used in comparative constructions. Linawis is no different.

Only Linawis adjectives can be affixed with the SUPERLATIVE affixes *pinaka-, kinaan*, and *ka- -an*, e.g, *pinakatrápik* 'most congested' from *trápik* 'congestion'; *kinatibúk-an* 'entirety' from *tibuók* 'whole'; and *kamagwángan* 'eldest' from *mágwang* 'older', and be reduplicated to gain an **approximative** meaning, e.g., *damò-dámò* 'quite a lot' from *dámò* 'many'. Furthermore, only adjectives can be marked by the non-paradigmatic adpositions *mas=* 'MORE.COMPARATIVE', as in (85), and *medyo* 'somewhat', as in (86).

- (85) mas=guráng na=ko more.comparative=old transformative=1sg.pm 'I'm already older.'
- (86) médyo=kulang~kuláng pa=nâ
 somewhat=approximative~lacking persistence=med.pm
 'That's still somewhat lacking.'

In addition to being gradable, adjectives are also typically associated with qualifying certain semantic types, including dimensions (Aikhenvald, 2015, p. 158). In Linawis, only dimension or measurement adjectives can be pluralized with the affix $\langle g \rangle$, e.g, *lagyom* 'deep.PL' from *lá*(*l*)*om* 'deep' and *dágkò* 'large.PL' from *dakô* 'large'.

While adjectives can be identified based on the applicable derivational affixes, some derivational affixes may also be used to produce affixes from nouns or verbs. Some adjective derivational affixes identified in the Linawis corpus are listed in Table 33.

Table 33

Form	Function	Example
-(á)non	ORIGIN	<i>Lawisánon</i> 'Madridejos native' (from <i>Lawís</i> 'Madridejos')
<in></in>	MANNER	<i>ináswang</i> 'monster horror' (from <i>áswang</i> 'mythological monster')

Linawis Adjectival Derivation

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Form	Function	Example
-án	STEREOTYPE	<i>hiloán 'poisoner'</i> (from <i>hilô '</i> poison')
-ón -(á)do _{spa}	CHARACTERISTIC	<i>hilumón 'silent type'</i> (from <i>hílom 's</i> ilent')
		<i>kilyádo '</i> acquaintance' (from <i>kílya '</i> identify')
		<i>kantiládo 'having a steep drop into the ocean'</i> (from <i>kantíl</i> 'a steep drop into the ocean')
pang-	INSTRUMENT	<i>pang</i> gobyérno 'governmental' (from <i>gobyérno</i> 'government')
<in></in>	LANGUAGE	B in isayâ 'Bantayanon language' (from <i>Bisayâ '</i> Bisayan')
ma-	STATIVE _{fossilized} /optional	<i>madámò</i> 'many' (from <i>dámò</i> 'many')

5.4.2 Adjective Predicates and Adverbs

Like nouns and verbs, adjectives may also function as predicates in Linawis. Adjectives may be the predicate of an intransitive clause where it may either be NON-EXCLAMATORY OT EXCLAMATORY. For the former, the clause has a prominent, as in (85–86); NON-PROMINENT; or NEUTRAL, as in (87), marked PSA (cf. Cebuano stative predicates with preposed nouns in Tanangkingsing, 2009, pp. 159–161). For the latter, the clause has a NON-PROMINENT or NEUTRAL marked PSA and an adjective predicate with the EXCLAMATORY affixes (pag)ka, ((pag)ka)-ROOT~hil?, or $-(h)a_{ceb}$ which express the intensity of the verb to the point of implied disbelief, as in (88) (cf. *oh how -ful* constructions in English).

- (87) damô gyápo=y mgá=disgrásya hántod=sarâ
 many INVARIANT=NEUT PL=accident UNTIL=now
 'There are still many accidents to this day.'
- (88) ka-bírò man=lat=siní=níya
 EXCLAMATORY-hassle EXPLANATORY=RELATIONAL=PROX. NPM=3sG. NPM
 'What a hassle it has become (for you)!'

Similar to verbal clauses, adjectival clauses are not only intransitive but may also be transitive, i.e., having two required arguments. In this case, the NON-PROMINENT OR NEUTRAL marked argument specify the properties of the predicate while the predicate qualifies the PROMINENT marked PSA (see also Tanangkingsing, 2009, pp. 159–161).

(89) punô kay sing balhíbo ang naw'ng full INTENSIFIER INDF. NPM hair РМ face 'The face was full of hair.' Baran

When adjectives are placed to the right of verbal clauses, they behave like adverbs, as in (90). Adjectives may also be nominalized as verb complex complements to have an adverbial function, as in (91).

- (90) **tárong** sya mo-káon **proper** 3sg.pm a.irr.pfv-eat 'He eats well.'
- (91) pa-utáng-Ø-on akó=y g<in>á<g>may cAUSATIVE-debt-U.IRR-PR.CPV 1sG.PM=NEUT <MANNER>small<PL> '(He) will let me borrow in small (chunks).'

5.5 Clause Structure

As with most languages (Aikhenvald, 2015, p. 205), Linawis' clause structure is composed of the non-particle predicate and the arguments. The former is either a verbal phrase or a noun/adjective while the latter are phrasal units composed of adpositions and nouns or nominalized verbs or adjectives. Adverbs, i.e., adverbial particles, nouns, verbs, or adjectives, are optionally added to the left or right of clauses.

Arguments always have an adposition that determines the argument's relationship to the predicate, as in (92). Based on Van Valin (2023, pp. 116–118), the Privileged Syntactic Argument (PSA) or subject is described by and controls the predicate while the non-PSAs are non-controlling arguments that complete the predicate's argument structure. OBLIQUES are peripheral arguments that are only required in ditransitive clauses, i.e., clauses that require three arguments (Aikhenvald, 2015, p. 205).

(92) daw_{ADVERB} gi-hátag_{PREDICATE} sang_{NON-PSA} puyá_A ang_{PSA} candy_{SD.U}
 SIMILATIVE U-giVE NON-PROMINENT kid PROMINENT candy
 sa babáye_{APPL} kalína_{ADVERB}
 OBLIQUE woman a.while.ago
 '(I) reckon the kid gave the candy to a woman a while ago.'

Each argument is assigned one of two macroroles or generalized semantic roles in clauses with verbal predicates, as in (92): the ACTOR (A) or the most agentive/active argument and the UNDERGOER (U) or the most patientive/passive argument (Van Valin, 2023, pp. 107–108). Loosely based on Haspelmath (2008, pp. 84–88), in Linawis ditransitive clauses, the U may be PRIMARY (PR) or the patient-like and completely affected U, SECONDARY (SD) or the theme/instrument-like and partially affected U, or APPLICATIVE/PARTITIVE (APPL/PART) or the least affected U and is typically either a PARTITIVE PATIENT or a promoted OBLIQUE, e.g., BENEFICIARY, RECIPIENT, OF LOCATIVE.

The basic clause and phrase structure of Linawis is summarized in Table 34 below. The basic clause and phrase structure is exemplified in (92) above.

Linawis B	asic Clause a	ina Phrase Struc	ture			
Clause	(Adverb)	Predicate	PSA	Non-PSA	Oblique	(Adverb)
Phrase		(Affix/ Adposition) + Noun/Verb	Adj	position + Noun/	Verb	

Table 34

Linawis Basic Clause and Phrase Structure

6 Pragmatics

This section describes some major discourse/pragmatic strategies in Linawis. These involve using Linawis morphosyntax to highlight pragmatic concerns.

6.1 Topic and Focus

TOPICS are what (multiple) utterance units are about and COMMENTS talk about the TOPICS, while FOCI are contrastive parts of clauses/utterances that are highlighted (Aikhenvald, 2015, pp. 267–272).⁴⁹ In Linawis, this FOCUS is fronted, i.e., placed leftmost, and is typically the predicate, as in (93), but the adverb and OBLIQUE may also be FOCUSEd without additional morphosyntactic processes besides fronting, as in (94).

- (93) **n-ag-check**_{FOCUS} sya sang laundry sa Cebu **A.REAL.IPFV-CONT-check** 3sg.PM NPM.DEF laundromat OBL.INDF Cebu 'He **checked** (**out**) the laundromats in Cebu.'
- (94) sa Cebu_{FOCUS} sya n-ag-check sang laundry OBL.INDF Cebu 3sG.PM A.REAL.IPFV-CONT-check NPM.DEF laundromat 'He checked (out) the laundromats in Cebu.'

In contrast to predicate/adverb/OBLIQUE FOCUS, FOCUSING arguments entail additional morphosyntactic processes. To be FOCUSEd, arguments are placed in the predicate position with obligatory PROMINENT marking, as in (95), because without PROMINENT marking, the FOCUS will lose its referential interpretation and be interpreted as a quality of the PSA rather than as a fronted argument, as in (96).⁵⁰ As a consequence, the former predicate and the other arguments are now nominalized and become the PSA through PROMINENT marking. VOICE affixes must now agree with the macrorole of the new predicate so an A predicate will have an A-VOICE PSA, as in (97), and a U predicate will have a U-VOICE PSA, as in (95). When performing the A role in their isolated forms, NON-PROMINENT pronouns may be fronted without additional morphosyntactic processes; however, this does not seem to signal FOCUS, as in (98).⁵¹

⁴⁹See Kaufman (2005) for a similar discussion on Tagalog topic/focus.

⁵⁰A similar phenomenon is observed for Tagalog in Himmelmann (1991, pp. 6–25).

⁵¹A cursory look at usage frequencies shows that constructions with ISOLATED forms might be preferred over clauses with connected forms (see Section 5.1.4).

- (95) ang laundry_{FOCUS.U} ang gi-check níya sa Cebu рм laundromat рм U.REAL.PFV-check ЗsG.NPM OBL.INDF Cebu 'He checked (out) the laundromats in Cebu.'
- (96) **laundry**_{FOCUS.NON-REFERENTIAL} ang gi-check niya sa Cebu **laundromat** PM U.REAL.PFV-check 3sG.NPM OBL.INDF Cebu 'It was **a laundromat** that he checked (out) in Cebu.'
- (97) **sya**_{FOCUS.A} ang n-ag-check sang laundry sa Cebu **3sg.pm** pm A.REAL.IPFV-CONT-check NPM.DEF laundry OBL.INDF Cebu '**He** checked (out) the laundromats in Cebu.'
- (98) íya gi-check_{FOCUS} ang laundry sa Cebu
 Зsg.NPM U.REAL-check PM laundry OBL.INDF Cebu
 'He checked (out) the laundromats in Cebu.'

As with many languages (Aikhenvald, 2015, pp. 267–270), Linawis topics are usually PSAs, but when foregrounded or reactivated they are fronted and dislocated with a terminal juncture between the topic and optionally *kay*-marked comment utterance units, as in (99).⁵² This manner of topicalization serves to shift, as in (99), or clarify, as in (100), topics. This comment marker *kay* is different from the discourse connective rationale *kay* (see Section 5.1.2) which shares the same form but introduces causes, reasons, or reasonings, as in (101).

(99) ang puyá_{TOPIC} kay рм kid TERMINAL.JUNCTURE COMMENT n-ag-ka-sakit~sakít man ang puyá A.REAL.IPFV-CONT-AUTO-DIMINUTIVE~illness explanatory pm kid '(About) the kid (right), the kid gets sick and stuff.' (100) ka-kílya akó peró sya_{TOPIC} w'à A.REAL.HPST-acquaint 1sg.pm but 3sg.pm terminal.juncture neg.epl sa ákon $_{\text{COMMENT}}$ ka-kílya A.IRR.HPST-acquaint 1sg.OBL 'I know (her) but as for her, (she) does not know me.' (101) imposíble kay ka-damô impossible **RATIONALE** EXCLAMATORY-many na=mang=gyod nga irô TRANSFORMATIVE=EXPLANATORY=ASSURANCE MOD dog '(That should have been) impossible because (there were) too many dogs!'

⁵²TOPICS may be repeated in the COMMENT, as in (99).

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6.2 Discourse Tracking and Stance Marking

Languages can track discourse by marking information as NEW OF OLD (Aikhenvald, 2015, p. 268). Linawis tracks information recency with NON-PERSONAL DEICTIC pronouns.⁵³ NEW information is marked with the PROXIMAL, as in (102); RECENT with MEDIAL, as in (103); and OLD with DISTAL, as in (104). These deictic pronouns can form phrases with marked information using the MODIFIER, as in (103), in which case PROMINENCE is marked through the pronoun or they can be disconnected from marked information, as in (102), in which case PROMINENCE markers are used. In the latter case, the pronoun must agree with the PROMINENCE of the marked information. The discourse tracking function of deictic pronouns is different from their spatial tracking function. With the latter function, physical distance is not implied, and deictic pronouns can be used with THIRD PERSON pronouns, as in (103).

(102) pahimángnò na=m=iní ang ákon preemptive.notice transformative=explanatory=prox.pm pm 1sg.npm kamagwángan_{NEW} eldest.kin

'My eldest son had already notified (me).'

- (103) panágsa lang=bayâ **iná=ng úwak**_{RECENT} INFREQUENTIVE LIMITING=FACTUAL **MED.PM=MOD crow** 'Crows are quite infrequent, right?'
- (104) ámbot kung náno probléma **sádto=níya**_{OLD} do.not.know if what problem **dist.npm=3sg.npm** 'I don't know what his deal is.'

The NON-PROMINENT deictic pronouns may also mark the accessibility of information and relative temporal distance of events in utterances. When used to mark accessibility and temporal distance, the NON-PROMINENT DISTAL pronoun marks utterances as occurring in a REMOTE PAST that is accessible to all interlocutors, as in (105), the MEDIAL as recently occurring but with privileged accessibility to the hearer, and the PROXIMAL as recently occurring but with privileged accessibility to the speaker (Baran, 2023d, pp. 231–242).⁵⁴ Accessibility/temporal marking NON-PROMINENT pronouns are placed in the adverb position.

(105) may=panagatán kamí=sádto
 EPL=sea.vessel 1PL.EXCL.PM=DIST.NPM
 'We had a fleet a long time ago.'

Another function of deictic pronouns is to indicate word-searching, as in (106), and hesitation, as in (107) (Tanangkingsing, 2023).⁵⁵ While the former function is common,

⁵³See Yoshimoto (1986) for a similar discussion on information recency and saliency marking of Japanese *ko-/so-/a-* pronouns.

 ⁵⁴Ilokano deictic pronouns similarly mark temporal distance of clauses (Fortis & Fagard, 2010, p. 18).
 ⁵⁵The language partner *Lóla* Teresita also uses *biláng* for these functions.

the latter function has only been shown for Cebuano in Tanangkingsing (2023). A similar function seems to be present in Linawis. In both cases qináng/qiníng as fossilized forms of PROMINENT deictic pronouns and the MODIFIER =ng are used. Typically, there is an accompanying NULL/EMPTY root $kwan/kuqán_{ceb}$ which can function as a substitutive FILLER and/or CENSOR, as in (106–107).⁵⁶

- (106) **iníng...** may=kuráy sádto nga **kwan FILLER** EPL=fence DIST.NPM MOD **NULL** 'Um... there was a fence that was um...'
- (107) ináng daw na-kwan lat=akó sa gásto HESITATION SIMILATIVE U.REAL.HPST-NULL RELATIONAL=1SG.PM OBL.INDF COST ba RETROSPECTIVE.NEGOTIABILITY 'So, like I was (terrified) of the costs, you know...'

7 Linawis As a Bantayanon and Bisayan Variety

Linawis is a robust and dynamic Bantayanon and Bisayan variety spoken in the municipality of Madridejos that is shaped by the highly multilingual context of Bantayan. This context led to the prevalence of code-switching and code-mixing to the point that speakers refer to Linawis as a *saksaksinágol* 'hodgepodge (speech)'. Cebuano remains the most influential language to the variety, with some language partners even considering Linawis a variety of Cebuano instead of Bantayanon in contrast to Carabio-Sexon's (2007) and Allen's (2022) findings and assertions.

The data shows that while Linawis is indeed a Bantayanon variety (as described in Allen, 2022) when spoken in more intra-community or informal contexts, Linawis can also seem more Cebuano (as described in Tanangkingsing, 2009) in more inter-community or formal contexts. For various purposes, reasons, or contexts, speakers freely navigate this Bantayanon-Cebuano spectrum and negotiate their variety with Cebuano and the other languages historically or presently used in Madridejos, especially Hiligaynon, Waray, Filipino/Tagalog, English, and Spanish. That said, the purpose of this study is not to identify the language status of Linawis but to describe this underdocumented variety and analyze it as both a variety on its own right and as both a Bantayanon and Bisayan variety and its interaction and negotiation with its context.

Linawis has 15 consonant phonemes, three vowel phonemes, and a phonemic stress distinction. These phonemes are organized into a (C)C(C)V(C)(C)(C) syllable structure. Linawis' four major morphosyntactic classes are particles, nouns, verbs, and adjectives, but there is also a residual class of adverbs. Linawis makes use of its morphosyntax to highlight pragmatic concerns including TOPICS, FOCI, information recency, accessibility/ temporal marking, word-searching, and hesitation.

This grammar system of Linawis has three major characteristics. One, Linawis speakers have large linguistic repertoires, and this is reflected in the grammar, e.g., the free

⁵⁶See Hsieh and Tanangkingsing (2006) for a discussion on NULL/EMPTY roots in Cebuano and Kavalan.

variation between the NON-PROMINENT Linawis *sing* and Cebuano *og*. Replacive loans are so prevalent that otherwise foreign features must be analyzed as part of the native system. Second, Linawis features abundant variation, e.g., the REMOTE PERFECTIVE ACTOR REALIS may be realized as *<ingm>*, *<im>*, *ming-*, or *ning-* depending on still yet known factors that must be investigated in a different study. Third, Linawis features extreme syncretism, e.g., the DISTAL *ádto* may be interpreted as NON-PERSONAL, SIMILATIVE, INDEFINITE LOCATIVE, EPL, OT OLD information marking.

Linawis' grammar system also has features that are possibly unique to it, although further verification is needed. Sociolinguistically, the use of multiple synonyms with the same historical source that underwent varying sound changes, e.g., *syò*, *sulô*, and *s'ò* all meaning 'torch', may be a possible shibboleth of Linawis. Phonetically, the occasional frication of stops has only been established for Linawis and not yet for the other Bantayanon varieties. With particles, the non-THEME marking uses of NEUTRAL =*y*, the distinct CONCEPTUAL *itón/sitón* pronominals, and the 2P particle *bahín* may be unique to the variety or the Bantayanon language. As for nouns, verbs, and adjectives, Linawis' use of the HONORIFIC *ka*= and the REMOTE/RECENT distinction for the ACTOR PERFECTIVE may be unique. Although not unique, the use of pronominals as HESITATION markers has only been shown for Cebuano and Linawis, and the use of proclitic forms for some 2P particles and the 2P particle *lat* 'RELATIONAL' has only been shown for Porohanon and Linawis.

The description of Linawis presented in this study is still incomplete. Further data on the neighboring Bantayanon varieties and a larger, more diverse pool of Linawis data are required to get a fuller picture of a variety that is highly sensitive to social context. Even within Linawis, there is a difference between the speech of the elderly in San Agustin and the younger people of the Poblacion.

This study presents a beginning actualization of Allen's (2022, p. 161) suggestion to document, describe, and analyze the varieties of the Bantayanon language and provides the initial data for the building of a Linawis corpus and the raw materials for literature and pedagogy. Perhaps, the next steps are to create more in-depth discussions of the grammatical features of Linawis laid out in this study and to make a full dialectological undertaking of the Bantayan islands and perhaps the neighboring islands. *Damo pa sing angay ipadayon kag paghikaplagan* [there is much left to continue and discover].

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9 Appendix

9.1 Symbols and Abbreviations Used

_	morpheme boundary	HPST	happenstantial
()	optional	IMP	imperative
	metalinguistic boundary	INCL	inclusive
;	unsegmentable	INDF	indefinite
\	suprafix	IPFV	imperfective
	deletion	IRR	irrealis
~	reduplication	LOC	locative
<>	infix	MED	medial
=	clitic	MOD	modifier
+	archaic	N-	non-
1	first person	NEG	negative
2	second person	NEUT	neutral
3	third person	OBL	oblique
А	actor	PFV	perfective
APPL	applicative	PL	plural
AUTO	auto-experiential	PM	prominent
CONT	continuous	PR	primary
CPV	contemplative	PRES	presentative
DEF	definite	PROX	proximal
DIST	distal	REAL	realis
DISTR	distributive	SD	secondary
EPL	existential-possessive-locative	SG	singular

EXCL exclusive

undergoer

U

9.2 Sociolinguistic Profiling of Language Partners

Barangay (Sitio)	Name ^a	Age (Gender)	Languages Besides Linawis	Places Lived Outside Madridejos
Talangnan [Tyangnan]	Teresita Milansuico	76 (F)	hil ceb tgl (limited)	Cebu Cadiz
(Pabrika)	Emily Tidoso	60 (F)	ceb hil	Iloilo Lapu-lapu
	Aura Tidoso	60 (F)	ceb hil tgl	Iloilo Manila
	Joshua Tidoso	N/A (M)	N/A	N/A
	Gregoria Mernida	N/A(F)	N/A	N/A
	Gina Carpocia	N/A(F)	N/A	N/A
	Mercy Daniot	N/A(F)	N/A	N/A
	Jocel Medallo	N/A(F)	N/A	N/A
	Elvie Villanuel	N/A(F)	N/A	N/A
Poblacion	Joycee Baran	N/A (F)	ceb hil tgl eng	Bacolod Cebu Lapu-lapu (current)
	Flory Toraea	N/A(F)	ceb	Lapu-lapu
Mancilang	Sherlyn Garcia	48 (F)	ceb (limited) hil	Cebu
	Mariah Sherianne Garcia	25 (F)	ceb	Cebu
	Margarita Mata	N/A(F)	ceb	Cebu
	Nerissa Jarina	N/A (F)	tgl	Cebu Manila Dubai
	Nicanor Jarina	N/A (M)	N/A	N/A
	Anonymous	N/A (F)	N/A	N/A
	Anonymous	N/A (F)	N/A	N/A
	Anonymous (Cebuano speaker)	N/A (F)	N/A	N/A
	Anonymous (Heritage speaker)	N/A (F)	N/A	N/A
	Anonymous (Second language speaker)	N/A (M)	N/A	N/A

Barangay (Sitio)	Name ^a	Age (Gender)	Languages Besides Linawis	Places Lived Outside Madridejos
Malbago	Ildifonso Dublin (Second language speaker)	75 (M)	ceb tgl	Daanbantayan Manila Cainta
Pili	Anonymous	60 (F)	hil ceb	Cebu Kabangkalan
San Agustin [Tinaan]	Fidela Tidoso	93 (F)	hil ceb tgl	Iloilo Cebu Mindanao
	Nelly Dela Peña	N/A(F)	N/A	Bacolod
San Agustin [Tinaan] (Boundary)	Anastasio Desabille	76 (M)	ceb hil tgl (limited) war	Negros Occidental Bantayan
San Agustin [Tinaan]	Wilfred (Pseudonym)	55 (M)	hil tgl (limited)	Bacolod Medellin
(Tagaytay)	Anonymous	67 (M)	hil	Negros Occidental Consolacion
	Anonymous	83 (F)	none	none

^a Unless specified, language partners are first language speakers of Linawis.

Philippine Semantics Research from 1990 to 2023: An Adjusted Scoping Review of Locally Produced Publications

Jino Antonio B. Escudero

Abstract

A scoping review of locally produced research publications about the semantics of Philippine languages was conducted, focusing on studies released between 1990 and 2023. A scoping review is a knowledge synthesis method that is especially useful for bodies of literature which have never been assessed before and are heterogeneous in nature. Research was collected in two phases: with a manual search in Phase 1 and a search through three databases and five local journals in Phase 2. A sample of 33 studies was assembled. Most of the studies were journal articles and were written in English. The most common methodology to study semantics was standard linguistic description and the most common languages studied were Tagalog, Cebuano, and Bikolano. Much ground has yet to be covered in the field of Philippine semantics. Suggestions are made for future directions when it comes to studying the semantics of Philippine languages.

1 Background of the Study

When compared to the study of their phonology, morphology, and syntax, the study of the semantics of Philippine languages is an understudied topic. Malicsi (2008) commented on this scarcity of research, stating that he had never read a study on the semantics of Filipino. He added that the topic of Filipino semantics, and by extension the semantics of Philippine languages as a whole, is one that is open to more research. Over a decade later, J. R. Javier (2022) would echo his sentiments by stating that "research on the semantics of Filipino remains elusive" (p. 31). In his semantic grammar of Filipino, J. R. Javier noted that it was difficult to find research on Filipino semantics that pursued semantics as its own separate field of study. Extant research often studied semantics as an offshoot of syntax and did not employ semantic theories or methodologies (J. R. Javier, 2022). Given this state of affairs, with the extant literature being piecemeal and several studies being not wholly dedicated to semantics and only semantics, an assessment of the current body of research would be useful in order to determine the progress that has been made

on the topic up to the present and to chart future directions of semantic research. The elusive and theoretically heterogeneous nature of this body of research means that it is important that researchers assess and scrutinize the pieces of semantic research on Philippine languages that are currently available. In order to determine which directions remain open for future research, we must first scope out and survey those topics that have already been pursued.

This study uses a scoping review methodology to survey the available literature on the semantics of indigenous Philippine languages. Scoping reviews are a knowledge synthesis method that can identify the trends and gaps of a body of research. They are usually done to inform future research, policy, or practice (Westphaln et al., 2021). Scoping reviews are particularly useful for bodies of research that have not yet been surveyed and are of a varied, heterogenous quality (Pham et al., 2014). To the researcher's knowledge, there has not yet been an overview that tackles the research that has been done specifically in the field of Philippine language semantics, unlike the fields of Philippine lexicography (see Newell, 1991) and general Philippine linguistics (see Reid, 1981). This scoping review aims to map the existing published literature on the semantics of Philippine languages, record their characteristics, and finally determine what gaps in the literature can be pursued by future researchers.

The understudied state of Philippine semantics is not surprising given the history of the field overall. Writing in 1897, the French philologist Michael Breal judged that semantics was, in the grand scheme of linguistics, a neglected field of study (Allan, 2016). It was only towards the latter half of the 20th century that many of today's contemporary semantic approaches and research programs were introduced and developed. One of the most popular approaches to linguistics in the 20th century, transformational generative grammar, only saw major developments in semantic analysis several years after the initial publication of Syntactic Structures (1957). Chomsky himself viewed semantics as "at best an add-on for the syntactic base" (Allan, 2016, p. 57), and it would only be later on when the importance of semantics to the concept of government in syntax would be emphasized and when semantic theory would be incorporated into generative grammar (Allan, 2016). Several of the semantic theories and methodologies used by contemporary Philippine researchers were only conceived of or only began to make significant strides relatively recently. Lakoff's *Metaphors We Live By* was published in 1980 with developments in metaphor theory following thereafter (Lemmens, 2016). The dynamic semantics approach of Discourse Representation Theory, as conceived by Kamp and Reyle, saw initial publication in 1993 (Dery, 2010). Wierzbicka and Goddard's Natural Semantic Metalanguage consisted of 55 semantic primes as recently as 1996 whereas its most recent iteration consists of 65 primes (Peeters, 2020; Petras, 2013). Even locally developed approaches to semantics only came about recently as well: the earliest manuscript presenting del Corro's Systems Correspondence Theory came out in 1988, Malicsi's own system of verbal componential analysis was presented at a conference in 1990, and Verstraelen's first unpublished manuscript collecting his Formal-Functional linguistic analysis was completed in 2000 (Sala-Boza, 2008) and circulated, most likely, only amongst a small group of scholars.

Further insight into the state of Philippine semantic research may be drawn from the state of Philippine linguistics overall. Towards the beginning of the 2010s, the most well-documented major languages in the Philippines were Tagalog, Ilokano, Cebuano, Hiligaynon, Kapampangan and Bikolano, while the major languages of Waray, Pangasinan, Maranao, and Maguindanao were not as thoroughly studied (Liao, 2009). Liao (2009) further recommended at this time that special attention should be focused on the lesser-studied languages of Negrito, Mangyan, Subanun, and the Central Luzon languages.

In other overviews of the state of Philippine linguistics, semantics is usually only mentioned in connection with other branches of linguistic study. Reid (1981) mentions a few developments in the field from 1970 to 1980. These include a sustained debate on the semantics of focus, increased research into semantic case relations, and generative semanticist studies on phenomena in the languages of Tagalog, Keley-i, and Kapampangan. Newell (1991) also touches on Philippines semantics, specifically its relation to lexicography. Discussing improvements that could be made for future dictionaries, Newell recommends that lexicographers build corpuses using written texts in Philippine languages, so as to provide dictionary users with examples of word usage that are based on actual and non-artificial collocations and co-occurrences of words. Furthermore, in terms of research output, Badiola (2022) records that, between 1971 and 1989, 13 theses that touched on topics of semantics were written by graduate students of the University of the Philippines Diliman (UPD) Department of Linguistics, five of which were about Thai while the rest were about Tagalog, Ilokano, and Kapampangan. In comparison to semantics, 27 theses in Badiola's survey that touched on topics of syntax had been written within the same period. Meanwhile, in a survey conducted by Dayag and Dita (2012), they record that from 2000 to 2009 less than a third of the articles published in the Philippine Journal of Linguistics (PJL) studied Philippine languages at all. A turn towards articles on applied linguistics had come to predominate the journal at the expense of articles on theoretical linguistics, i.e., studies on the phonology, morphology, syntax, and semantics of Philippine languages.

Based on the trends we can see from that state of Philippine linguistics and the field of linguistics overall, we can extrapolate and further sketch out the state of semantic research on Philippine languages beyond the observations made by previous commentators. First, assuming semantics research is reflective of overall trends in the documentation of Philippine languages, it is likely that Tagalog, Ilokano, Cebuano, Hiligaynon, Kapampangan, and Bikolano will be better covered in the literature than minor languages and even other major languages. Second, per J. R. Javier (2022), much research concerning topics of semantics has had to do with how semantics interfaces with morphology and syntax. One need only to read Reid (1981) and Newell (1991) to see how the semantics of Philippine languages, when it is discussed, is usually considered in relation to other fields in linguistic study rather than its own separate field of inquiry. Third and finally, semantics is less studied when compared to other branches of linguistics. This can be seen both at the level of the graduate studies research at UPD and articles in the PJL (Badiola, 2022; Dayag & Dita, 2012).

2 Research Questions

In order to make recommendations with regard to future directions in the research of the semantics of Philippine languages, as well as identify research gaps within the current body of literature, this study aims to assess the current state of research by surveying the extant literature. Thus, the study shall address the following research questions:

- 1. From 1990 to 2023, what locally produced researches have been done that study the semantics of indigenous Philippine languages?
 - a) What Philippine languages have been studied?
 - b) What research topics have been covered?
 - c) What approaches, theories, or methodologies have been used?
 - d) What languages are these researches written in?
 - e) What are some of the other characteristics of the extant literature?
- 2. Based on the findings of this research, what recommendations can be made for future researchers in Philippine semantics?

3 Significance of the Study

The results of this study will be useful to any researcher interested in the topic of the semantics of Philippine languages. By analyzing the characteristics and commonalities of currently published research, this study can guide future researchers in determining future topics, building their reviews of related literature, and deciding on appropriate methodologies and theoretical frameworks. Future researchers will be able to determine, on a macro level, which Philippine languages have yet to be studied thoroughly in terms of their semantics, and on a micro level, which specific semantic topics in even well-studied languages have yet to be explored. Additionally, this study will be useful to any researchers interested in making a more systematic review of the literature since, due to the research design and inclusion criteria of the study, only a portion of the extant semantics literature could be reviewed and surveyed. Overall, it is hoped that this study will be a vantage point from which future researchers can chart their courses in the study of Philippine linguistic meaning.

4 Scope and Delimitations

4.1 Inclusion Criteria

This study surveys published semantics research on indigenous Philippine languages that were authored between 1990 and 2023, either authored by Filipino researchers or released in a publication based in the Philippines.

An indigenous Philippine language is herein defined as a variety of language that belongs to the Philippine subgroup of languages, which is in turn a branch of the Western Malayo-Polynesian subgroup. Languages such as Philippine English and Hokkien Chinese, while spoken in the Philippines, ultimately belong to different subgroups and are not of the Philippine subgroup; therefore studies on these languages were not included in the present study.

Restricting the time frame of the study and deciding to focus on locally produced literature were done due to time constraints imposed by the conduct of this study in an undergraduate research course. The following set of inclusion criteria was devised, as part of using the scoping review methodology, in order to carefully determine what research could be included in the study. All research in the sample of this study conformed to inclusion criteria 1, 2, 3, either 4a or 4b, and either 5a or 5b:

- 1. The research must study an indigenous Philippine language.
- 2. The research must have been published anytime between the years 1990 to 2023.
- 3. The research must be written in a language intelligible to the researcher.
- 4a. The research must be authored or co-authored by a Filipino researcher.
- 4b. The research must be published in a peer-reviewed journal based in the Philippines or in a published work printed in the Philippines.
- 5a. The research employs a semantic theory or methodology (e.g., Metaphor Theory, Natural Semantic Metalanguage, Discourse Representation Theory, etc.).
- 5b. The research contains the keywords semantic, semantics, polysemy, or some derivative in its title, abstract, introduction, or in the tags in the database in which it was found. Studies that focus on semantic roles are excluded from the sample.

Inclusion criterion 1 was added to exclude semantics research on Philippine languages that were not part of the Philippine subgroup such as Philippine English and Hokkien Chinese. Inclusion criteria 2, 4a, and 4b were added to ensure that any pieces of included research were all locally produced publications from the study's determined time period. Inclusion criteria 3 restricts the sample to only pieces of semantic research that are written in languages intelligible to the researcher, these languages being English, Filipino, and Bicolano. Inclusion criteria 5a and 5b were added to qualify what precisely constitutes a piece of semantics research. Due to time constraints, grammars, grammar sketches, and studies tackling the topic of semantic roles were excluded from the study's inclusion criteria; research which was only available in abstract form was deemed insufficient for inclusion.

4.2 Delimitations

By virtue of this study's inclusion criteria, the following types of research are not covered by the study:

- any semantics research on Philippine languages produced before 1990;
- any semantics research produced by Filipino researchers about languages spoken in the Philippines but are not classified as a member of the Philippine subgroup of languages;
- any semantics research produced by Filipino researchers about non-Philippine languages (e.g., visual metaphors, standard varieties of English, Spanish, etc.);
- any semantics research on Philippine languages produced by non-Filipino scholars published in publications based outside of the Philippines;

- unpublished theses and dissertations available in university archives within and outside of the Philippines; and
- grammars, grammar sketches, and studies of semantic roles.

5 Research Design

5.1 On Scoping Reviews

A scoping review is a type of study or methodology which synthesizes the available research on a given topic or within a given field. While the scoping review originated in the field of medicine, it has, over the decades, become a methodology used in different natural and social sciences. Motivations for undertaking a scoping review typically include the following (Munn et al., 2018; Pham et al., 2014):

- 1. to map existing literature on a research topic that has not yet been extensively investigated or is of a complex, heterogeneous nature;
- 2. to clarify key concepts and definitions as they are used in the literature;
- 3. to examine the extent, range, and nature of the research being conducted about the topic;
- 4. to determine the potential usefulness of undertaking a more systematic review of the literature in the future; and
- 5. to identify research gaps in the current body of research.

Apart from motivations b and d, all of these motivations inform the conduct of this study. Philippine semantics is an understudied topic (J. R. Javier, 2022; Malicsi, 2008) within an already theoretically heterogeneous field (Riemer, 2016) and this makes it an ideal candidate for a scoping review. An engagement with the literature would map the terrain of what has already been researched while recording and tabulating other pertinent characteristics of the extant research. By conducting a scoping review, it can be determined whether a more thorough literature review should be conducted, as well as which topics future researchers in Philippine semantics can pursue. Motivations 1 and 3 correspond to research question 1 of this study, and motivation 5 with research question 2 (see Section 2).

An additional motivation for pursuing a scoping review is that it is not necessary to assess the quality of the research that is included within it (Dijkers, 2015). During the conceptualization stage of this study, the researcher was advised against pursuing a "state of the art" literature review due to the fact that such syntheses of research are usually conducted by active practitioners within the field. As such, a methodology was sought out that would enable the researcher to survey the literature of the topic at hand without the need to make assessments as to the quality of research surveyed. Nevertheless, to ensure an amount of quality control, the research that was included in the sample came only from published materials and publications that had peer review.

The study followed the five-stage methodology for scoping reviews detailed by Westphaln et al. (2021) while foregoing the optional sixth stage of expert consultations. In Stage 1, the research questions of the study were formulated, stated, related to the

motivations of the study, then used to inform the subsequent stages of data collection and synthesis. In Stages 2 and 3, the scope of the study and the inclusion criteria for selecting research to add to the sample of study were determined. In Stage 4, data from the sample was extracted, tabulated, and analyzed in accordance with the research questions of the study (see Section 2). In Stage 5, the results of the study were synthesized: results were reported, conclusions from the data were drawn, and recommendations for future researchers were formulated. One adjustment made to the research design that was recommended by Westphaln et al. (2021) is that this study was conducted not by a team of researchers but by only one researcher. A second adjustment made was that, due to time constraints, limitations to the inclusion criteria (such as restricting the study to only published material) had to be added for the sake of the study's feasibility. Westphaln et al. (2021) do allow for researchers to limit the scope of their studies, so long as such limitations are explained and justified.

5.2 Data Collection

Data collection for the scoping review proceeded in two phases. Phase 1 began with a manual data collection of Philippine semantics research papers. The search was informed by the researcher's own knowledge of specific pieces of semantic research on Philippine languages and recommendations for articles to include in the study that were made by the researcher's adviser and a consulted faculty member from the UP Diliman Department of Linguistics. This initial data collection was conducted from March 31 to May 15, 2023. From this initial data collection, a sample of 14 research papers was assembled then reviewed. From this initial sample of research as well as the reading done in preparation for the background of the study, a set of 16 search terms was devised. This set of search terms was devised to inform and design the database data collection in Phase 2.

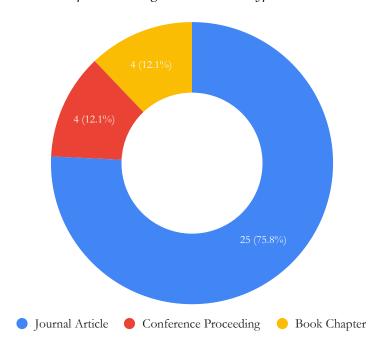
In Phase 2, the devised set of search terms were used in crawling three online databases and five local academic publications for articles that can be included in the present study. The three databases were (a) the Summer Institute of Linguistics Language and Culture Archives (SIL-LCA), (b) Philippine E-Journals (PEJ), and (c) the MLA International Bibliography with Full Text (MLAIB). The SIL-LCA and PEJ were both selected due to this study's focus on locally produced publications, while the MLAIB was selected due to it being a comprehensive "index for the study of language, literature, linguistics, rhetoric and composition, folklore, and film" (The University Library, 2023). Meanwhile, the five local academic publications were (a) the Philippine Journal of Linguistics, (b) Social Science Diliman, (c) Humanities Diliman, (d) Philippine Humanities Review, and (e) the Cordillera Review. Phase 2 of data collection took place from May 17 to May 22, 2023. Search results from all databases and publications were then reviewed for acceptability with regard to the study's inclusion criteria. Research which met the study's inclusion criteria were then added to the study's sample. The resultant number of studies which constitute the sample of the research totals to 33 studies.

6 Data Analysis and Discussion of Findings

In this section, data collected from the sample of the study which consisted of 33 pieces of Philippine semantics research will be presented, analyzed, and discussed. In Section 6.1, the general characteristics of the sample will be discussed. Section 6.2 tackles which Philippine languages and topics of study had been covered by the study's sample. Section 6.3 is about the methodologies and theories utilized by the research included in the sample. Section 6.4 is a discussion of the various findings.

6.1 General Characteristics of the Research Sample

Figure 1



Breakdown of Research Sample According to Publication Type

Most of the sample consisted of articles from journals, with 25 researches being of this type, while four pieces of research were from conference proceedings (Lorenzana, 2006; Luquin, 2006; Malicsi, 1990; Mattes, 2006) and four were studies that were anthologized in books (Hernandez, 2016; Law, 1998; Ma & Brainard, 1998; Pebley, 1998). Among the journal articles, four were international publications that were authored or co-authored by at least one Filipino researcher, six were locally published works that were authored by non-Filipino researchers, while the rest were local publications that were written by Filipino researchers. Two of the conference proceedings were written by Filipino researchers and the other two by non-Filipino researchers. Among the studies anthologized in books, only one was authored by a Filipino (Hernandez, 2016).

8 (24.2%) 8 (24.2%) 25 (75.8%) • Written in English • Written in Filipino

Figure 2

Breakdown of Research Sample According to Language Used

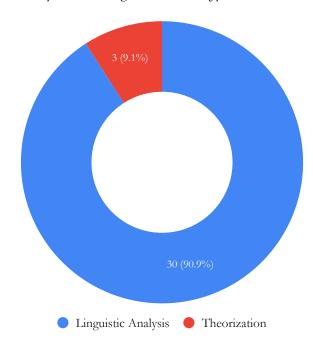
For the purposes of this paper, Tagalog and Filipino will be treated as the same language. Almost a quarter of the studies in the sample (eight to be exact) were written in Filipino while the rest were written in English. While 87.5% of the sample consisted of publications based in the Philippines, English was the predominant language used by researchers in their writings.

In her survey of the almost 50 years' worth of publications in the *Philippine Journal of Linguistics*, Dumoran (2021) classifies the papers of the journal according to four types: (a) reviews (evaluations of individual works on Philippine language research), (b) state-of-the-art papers (historical overviews of a certain body of Philippine language research), (c) position papers (which advocate for a new theory or methodology), and (d) linguistic analyses (linguistic descriptions and discourse analyses).

In a similar vein, the sample for the present study can be divided into two types: (a) theorization papers and (b) linguistic analyses. A theorization paper is similar to a position paper, insofar as it forwards a new linguistic theory or methodology, but where they diverge is that theorization papers not only present a theory but also apply it to a Philippine language within the space of the same paper. Three theorization papers were found in the sample: (a) Malicsi (1990), where he applies his own system of componential analysis to Botolan Sambal; (b) del Corro (1990), who develops her Systems Correspondence Theory by researching polysemy in Kapampangan and Japanese; and (c) Zorc (2004), where he demonstrates his methodology for semantic reconstruction.

Figure 3

Breakdown of Research Sample According to Research Type



The other 30 papers in the sample were linguistic analyses which used linguistic description or established methodologies and theories in their study of a Philippine language.

The sample included no reviews or state-of-the-art papers. Following 2004, there were no more theorization papers that were published, indicating that in the latter half of the 2000s and beyond, local research has trended towards the use of established methodologies for the study of Philippine language semantics rather than research that aims to develop its own semantic theories.

6.2 Topics and Languages Covered by the Research Sample

Table 1 presents the Philippine languages, with their corresponding topics covered in the sample. These are arranged from those with the highest number of studies to the lowest number of studies.

In the leftmost column, the number of studies that touch on a Philippine language are indicated in parentheses next to the language. The middle column breaks a language down into what topics about it have been studied, and the rightmost column lists the specific research papers that tackle that specific combination of language and topic. In the interest of space, only languages with at least two pieces of research or more were included in the table. The following languages were also studied in the sample but only had one piece of research dedicated to them: Agusan Manobo (Tampos-Cabazares, 2016), Bantoanon (Ma & Brainard, 1998), Kagayanen (Pebley, 1998), Mangyan Patag (Luquin,

2006), Sinugbuanon (Augusto, 2019), and Waray (Lee, 2019). Gallego (2018) and Zorc (2004) were large surveys that studied the semantics of a large swath of Philippine languages, each covering languages that were nowhere else studied in the sample such as Agutaynen, Binukid, Inibaloi, Kalagan, Pangasinan, Maguindanao, Sangil, Yakan, and many others.

Table 1

Coverage of Philippine Languages and Topics in the Sample, Arranged From Languages With Highest Number to Lowest Number of Studies Dedicated to Them

Language	Topic	Research Papers
Tagalog/Filipino (23)	Grammatical Category	Alonso-Ovalle and Hsieh, 2021; Cabazares, 2016; Dery, 2010; Hernandez, 2016; Klimenko and Endriga, 2016
	Lexemes/Semantic Domains	Augusto, 2019; Cabazares, 2016; Church et al., 1998; Gallego, 2018; Ikari, 1991; R. E. Javier, 2016, 2017, 2018; Joaquin, 2014; Klimenko and Endriga, 2016; Lorenzana, 2006, 2015 Petras, 2013; Tiongson et al., 2020; Zorc, 2004
	Marker(s)	Gallego and Zubiri, 2013; Hernandez, 2016
	Metaphors	Gaitan-Bacolod, 2010; Hernandez, 2016; Lee, 2019; Tiongson et al., 2020
	Morphological Processes	Hernandez, 2016
	Sentences	Bazar, 2010; Dery, 2010; Tiongson et al., 2020
Cebuano (7)	Grammatical Category	Bonus-Adeva, 2005
	Lexemes/Semantic Domains	Bonus-Adeva, 2005; Gallego, 2018; Ikari, 1991; Lee, 2019; Zorc, 2004
	Sentences	Solon-Villaneza, 2015; Trosdal, 1995
Bikolano (4)	Lexemes/Semantic Domains	Gallego, 2018; Mattes, 2006; Zorc, 2004
	Morphological Processes	Mattes, 2006
Botolan Sambal (3)	Lexemes/Semantic Domains	Gallego, 2018; Malicsi, 1990; Zorc, 2004
Cuyunon (3)	Metaphors	Lee, 2019
- · ·	Lexemes/Semantic Domains	Gallego, 2018; Zorc, 2004
Kapampangan (3)	Lexemes/Semantic Domains	del Corro, 1990; Gallego, 2018; Zorc, 2004
Aklanon (2)	Lexemes/Semantic Domains	Gallego, 2018; Zorc, 2004
Hiligaynon (2)	Lexemes/Semantic Domains	Gallego, 2018; Zorc, 2004
Isneg (2)	Lexemes/Semantic Domains	Gallego, 2018; Zorc, 2004

Language	Topic	Research Papers
Itbayat (2)	Lexemes/Semantic Domains	Gallego, 2018; Zorc, 2004
Kankanaey (2)	Lexemes/Semantic Domains	Gallego, 2018; Zorc, 2004
Kinaray-a (2)	Metaphors	Lee, 2019
	Lexemes/Semantic Domains	Gallego, 2018
Maranao (2)	Lexemes/Semantic Domains	Gallego, 2018; Zorc, 2004
Masbate (2)	Lexemes/Semantic Domains	Gallego, 2018; Zorc, 2004
Romblomanon (2)	Affixes	Law, 1998
	Lexemes/Semantic Domains	Gallego, 2018
Samar-Leyte (2)	Lexemes/Semantic Domains	Gallego, 2018; Zorc, 2004
Tausug (2)	Lexemes/Semantic Domains	Gallego, 2018; Zorc, 2004
Tboli (2)	Lexemes/Semantic Domains	Gallego, 2018; Zorc, 2004
Teduray (2)	Lexemes/Semantic Domains	Gallego, 2018; Zorc, 2004

The sample was reflective of a few of the trends of Philippine linguistics in general. Among the major languages, Tagalog was significantly well-researched at 23 studies, with Cebuano, Bikolano, Hiligaynon, Kapampangan, and Maranao distantly following behind. These languages were comparatively better documented than the following major languages which only had one piece of semantics research dedicated to them: Waray (Lee, 2019), Pangasinan (Gallego, 2018), and Maguindanao (Gallego, 2018). While Botolan Sambal and Kapampangan were covered by three studies apiece, most Central Luzon languages, alongside Negrito, Subanun, and Mangyan languages received little to no scholarly attention. These findings reinforce Liao's (2009) view that more documentation should be focused on Maranao, Waray, Pangasinan, Maguindanao, Negrito, Subanun, Mangyan, and many of the languages of Central Luzon. Semantics research on these neglected minor and major languages is needed.

The most common topic of research was the semantics of Lexemes/Semantic domains. These studies typically tackle the semantics of verbs (Alonso-Ovalle and Hsieh, 2021; Klimenko and Endriga, 2016; Ma and Brainard, 1998; etc.) or the semantics of a network of related lexemes such as for emotion concepts (Church et al., 1998), mental illness (R. E. Javier, 2016), terms for happiness (Petras, 2013), and others. The second most common topic tackled was the semantics of certain grammatical categories, such as the semantics of modality (Alonso-Ovalle & Hsieh, 2021; Cabazares, 2016), aspect (Dery, 2010; Hernandez, 2016), transitivity (Bonus-Adeva, 2005), and so on. Following grammatical categories, the semantics of metaphorical expressions (Gaitan-Bacolod, 2010; Lee, 2019; Tiongson et al., 2020) and the semantics of sentences (Bazar, 2010; Trosdal, 1995) were the third most popular topics. Less studied were the semantics of affixes, markers, and morphological processes.

6.3 Semantic Theories and Methodologies Used

The most common method by which researchers analyzed the semantics of Philippine languages was standard linguistic description. These studies did not rely on an explicit

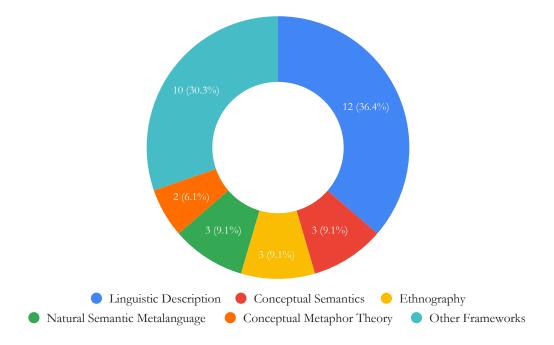


Figure 4

Semantic Theories and Methodologies Used by Research in the Sample

semantic theory or methodology to examine their topics and instead used descriptions of morphology or syntax to gain insight into how these levels of languages affect meaning. Examples include Hernandez (2016), Ikari (1991), and Klimenko and Endriga (2016). Three studies drew on Conceptual Semantics (Law, 1998; Ma & Brainard, 1998; Pebley, 1998), three used Natural Semantic Metalanguage (Lorenzana, 2006, 2015; Petras, 2013), three took an ethnographic approach (R. E. Javier, 2016; Luquin, 2006; Tampos-Cabazares, 2016), and two used Conceptual Metaphor Theory (Lee, 2019; Tiongson et al., 2020). Other schools of semantics in the sample included Formal Semantics (Alonso-Ovalle & Hsieh, 2021), Model-Theoretic Semantics (Joaquin, 2014), and Segmented Discourse and Representation Theory (Dery, 2010).

Locally developed theories of semantics were also in the sample, such as Malicsi's system of Verbal Componential Analysis (1990), del Corro's Systems Correspondence Theory (1990), and Verstraelen's formal-functionalism (Trosdal, 1995). The remaining studies used Hopper and Thomson's model for transitivity to study the semantics of verbs in Cebuano (Bonus-Adeva, 2005). Church et al. (1998) employed semantic clustering and sorting for Filipino emotional concepts in their study, while Zorc (2004) performed semantic reconstruction for Austronesian protoforms. Solon-Villaneza (2015), on the other hand, employed a typology of methods used to translate the meaning of Cebuano poetry in their study.

6.4 Findings and Discussion

The data reinforces Malicsi's (2008) view of the wide, open ground for research on the semantics of Philippine languages. In the wake of the comments he made in the late 2000s, there has been an increase of studies on the semantics of Filipino, with 19 studies in the sample tackling or touching on the semantics of various phenomena in the language. In concurrence with J. R. Javier (2022), many of the studies did pursue the study of semantics by way of studying syntax and morphology, but a good number of articles in the sample actually utilized semantic theories and methodologies as well. As can be surmised from the data above, other than the semantics of Filipino, much ground has yet to be covered when it comes to researching the semantics of Philippine languages. While other major languages such as Cebuano, Bikolano, and Kapampangan have been studied to some degree, it can hardly be said that the task of studying the semantics of these languages has been done with the same breadth, depth, and methodological diversity as Filipino. The same can be said for minor Philippine languages, many of which did not receive anywhere near as much scholarly attention as the major languages in the sample. Majority of the papers were journal articles, most of them written in English. Most of the papers were linguistic analyses rather than theorization papers. The most common methodology for studying semantics involved describing morphology and syntax to gain insight into the semantics of linguistic phenomena. The most common topic of study was the semantics of a certain semantic domain or set of lexemes.

Following the reading of the studies in the sample, it can be said that one salient benefit to studying the semantics of a Philippine language is that it can allow speakers to make conscious improvements to the ways we use language to convey meaning. Following his research about disaster terms across Tagalog and four Visayan languages, Lee (2019) presents a possible substitution for the English term *storm surge* with the more locally recognizable Visayan term *surok*, a term which does not exist in Tagalog. Using *surok* instead of *storm surge* could potentially be useful for easier communication during future natural disaster events in the Philippines. Cabazares (2016) also uses semantic research as a way to make suggestions for the improvement of the Tagalog translation of the Universal Declaration of Human Rights (UDHR). By investigating the expressions that convey tense, aspect, modality, and volitionality in the English UDHR and comparing them to how they are translated in the pre-existing Tagalog version of the UDHR, Cabazares is able to point out deficiencies in the phrasing of the Tagalog translation and suggest improvements—namely, that the new target text should consistently incorporate the modals *dapat* and *kailangan*.

Research on semantics also provides greater insight into the meanings hidden within the lexicons of our local languages. Because of this, the study of Philippine semantics not only attracts researchers trained in linguistics. Based on the sample, the analysis of the way languages organize and structure concepts and the underlying meanings behind those concepts was a research interest among other social science researchers as well. The study of semantics has applications in fields such as anthropology, psychology, education, and literary study. Tampos-Cabazares (2016) used an ethnographic approach to render understandable the "pathological" violence and killings committed by the Agusan Manobo by exploring the centrality of the concepts *ginhawa*, *pangayaw*, and *husay* and how these inform the Agusan Manobo's notions of conflict arbitration and resolution. The resultant work provides a point of entry for understanding the conditions and the decision-making processes which push an ethnolinguistic group into certain forms of behavior incomprehensible to mainstream Filipino society.

In a similar vein, studies that place emphasis on the "insider's point of view" with regard to the semantics of indigenous Filipino concepts such as Lorenzana (2006, 2015), Luquin (2006), and Petras (2013) shed light on the conceptual distinctiveness of local terminology and teach us much about the ways native speakers attempt to understand the world that are embedded within the words they speak from day to day. Studies regarding the semantics of Filipino mental health concepts such as Hernandez (2016) and R. E. Javier (2016) can help reveal our indigenous ways of thinking about mental phenomena and thereby inform local mental health approaches and practices. With regard to education, Tiongson et al. (2020) exemplified an approach to teaching critical literacy to students by way of lessons that incorporate Lakoffian Conceptual Metaphor Theory. Meanwhile, Solon-Villaneza (2015) took semantics into account when analyzing the translation strategies necessary for a successful translation of Cebuano poetry. Finally, Petras (2013) made advances in promoting pantayong pananaw in elucidating the meaning of Tagalog saya 'happiness' terms using the Natural Semantic Metalanguage. Pantayong pananaw refers to the concept of thinking, discussing, and further shaping one's civilization (kabihasnan) through the perspective of an insider addressing fellow insiders and the culture (kalinagan) that is expressed when natives interact with fellow natives. This is accomplished through discourse that is rooted in indigenous linguistic structures and concepts that thereby articulate the strong, integrated, and unified kalinangan of the kabihasnan (Salazar, 1991/2000).

As stated by Wierzbicka (2010, p. 16): "The lexicon of a language is a treasury of meanings. If these meanings can be revealed [...] much can be learned about the entrenched ways of thinking characteristic of a given society or cultural sphere and about their cultural underpinnings." Semantic research, and most especially semantic research that is carried out by native speakers of the languages being studied, provide an opportunity for cultural self-examination. Semantics can make explicit what is hidden to us in the languages we know and the languages of our neighbors, allowing us to realize how language shapes our thinking and, in turn, how we can therefore change or use language to change the ways we think.

7 Conclusion and Recommendations

The study was a scoping review of locally produced research on the semantics of Philippine languages published between 1990 and 2023. The scoping review proceeded in two phases. In the first phase, manual collection of extant literature was collected based on the researcher's own knowledge of the field and suggestions from his research adviser and a faculty member from the UP Diliman Department of Linguistics. Based on this initial batch of publications a set of search terms was devised. In the second phase,

the search terms were input into three databases of linguistics research and five local humanities and social science publications. The studies were checked for acceptability with regard to the study's inclusion criteria and the final sample of publications was 33.

Majority of the research collected were journal articles, four were conference proceedings, and another four were chapters anthologized in books. Only eight studies were written in Filipino. 30 studies used established methods to conduct their research while three studies from 1990-2004 attempted to develop their own systems of semantic analysis.

Tagalog was the most popular language researched with Cebuano, Bikolano, Botolan Sambal, Cuyonon, and Kapampangan following distantly behind. The sample then, was, to a degree, reflective of general trends in Philippine language documentation (Liao, 2009). The sample was methodologically heterogeneous and varied, with different researchers tackling different languages with different theories and methodologies. The most popular method to research semantics was standard linguistic description where researchers studied the interface between morphology, syntax, and semantics. The second most popular methods of studying semantics, at a three-way tie, were Conceptual Semantics, Natural Semantic Metalanguage, and ethnographic approaches. The study of semantics attracted mostly linguists, but psychologists, anthropologists, education, and literary studies researchers contributed to the sample as well.

This study reinforces the current state of the field characterized by comments from J. R. Javier (2022), Liao (2009), and Malicsi (2008). Alongside this reinforcement however, this study also further refines our current understanding of the field. Based on the data extracted from the sample, we can pinpoint which languages need greater attention and semantic documentation. Additionally, even for languages such as Tagalog, Cebuano, and Bikolano, which have received a relatively substantial amount of scholarly attention, the tabulation of data in the data analysis portion of this paper allows future researchers to pinpoint which topics in these languages are still neglected and are still ripe for research. This study also brings to light which semantic theories and methodologies have been practiced the most, knowledge which has previously only been spoken about in general terms, if at all, and allows us to see which approaches are saturated and which are in need of more practitioners and applications. This study's main contribution is a more specific understanding of the state of research on the semantics of Philippine languages, and from this specific understanding, future researchers can make distinct and precise contributions in the furtherance of the field.

Based on the findings of the research several recommendations can be made to future researchers of Philippine language semantics. First, virtually any research on any Philippine language other than Tagalog would be a welcome addition to the field. Researchers interested in studying the semantics of major languages should focus their attention on Ilokano, Hiligaynon, Waray, Pangasinan, Maranao, and Maguindanao. Researchers interested in the semantics of minor languages can pursue any language variety though, per Liao (2009), their efforts would be most beneficial if they were directed towards Negrito, Mangyan, Subanun, and the languages of Central Luzon. Secondly, beginning semanticists who want to get their feet wet are advised to pursue topics that study the semantics of a set of lexemes or a specific semantic domain: this choice of topic was

the most popular in the study and can be pursued via standard linguistic description such as in Hernandez (2016). Another possible beginner semantics research project that is manageable in scope is to use Natural Semantic Metalanguage to explicate the meaning of a single lexeme akin to Lorenzana (2006, 2015) or even Petras (2013) but at a much more reduced scale. The application of Conceptual Metaphor Theory in studies like Lee (2019) and Tiongson et al. (2020) is another approachable alternative. Thirdly, researchers interested in conducting an expanded review of the Philippine semantics research can include in the scope of their studies theses and dissertations from universities as well as research articles authored by non-Filipinos in foreign publications. Fourthly, researchers interested in locally developed theories of semantics should consult the literature on Malicsi's Componential Analysis (1990), Systems Correspondence Theory (del Corro, 1988, 1990), and Verstraelen's Formal-Functionalism (Sala-Boza, 2008). Such researchers can expand the foundations and applications of these theories by utilizing them in researches that they author, should they find them useful for their purposes. Finally, researchers seeking to contribute to the intellectualization of Filipino languages should write their semantic research in Philippine languages other than English.

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Reacted 😮 to Your Message: Contrasting the Functions of the Reacji and of the Standard Emoji in Messenger Conversations

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Abstract

The reacji, the iteration of the emoji used to react to messages, has been observed to reduce noise and make conversation more efficient. This study aimed to pinpoint the differences between reacji and emoji using four concepts from traditional conversation analysis (CA): adjacency pairs, turn-taking, preference, and repair. The data was culled from six (6) dyadic conversations with young college-age Filipinos on Messenger. While findings show much similarity between the reacji and emoji, observations in line with the four concepts prove that there are several functions in which the reacji indeed differs from the emoji, such as being the preferred response to certain prompts (e.g., encouragement) and allowing simultaneous and more direct engagement. The paper concludes with acknowledging the contribution of the reacji in streamlining online communication.

1 Introduction

The *emoji* has been noted for its pervasive influence in computer-mediated communication (CMC), pop culture, and numerous fields of research. A portmanteau of the Japanese words for 'picture' (絵 *e*) and 'word' (文字 *moji*), the first emoji were introduced in 1999 by Shigetaka Kurita, an employee of Japanese mobile company NTT DoCoMo, as little pixelated icons for use in its newly released mobile internet platform, i-mode (Negishi, 2014). As more units representing other ideas beyond expressions, such as places, animals, and national flags, were added, emoji have mostly been defined as pictographs (see Alshenqeeti, 2016; Gesselman et al., 2019; Sadia, 2004), i.e., symbols serving as direct representations of concepts or objects (Houts-Smith, 2010). For example, the emojis is and of represent a hug and a dolphin, respectively. Usually selected from a built-in emoji keyboard in most digital applications, they may also be expressed via

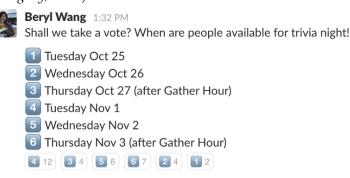
typing *shortcodes* (e.g., :hugging_face:) as supported by select apps such as Discord (Emojipedia, 2019).

After the Unicode Consortium standardized the first collection of emoji in 2010, use of emoji became globally popular (Novak et al., 2015). Its functions included controlling the tone of the message, clarifying jokes, and generally enlivening conversation (Konrad et al., 2020; Stapa & Shaari, 2012). Emoji use, however, has extended to other purposes aside from just stylistically or emotionally augmenting ideas expressed in words. The pictographic nature of other non-expression emoji allows users to string or match the images together, creating personalized meaning without text (Kelly & Watts, 2015) and giving rise to propositions of a solely emoji-based language (see Alshenqeeti, 2016; Danesi, 2016). As of 2021, there are currently more than 3,300 emoji in the Unicode Standard (Logi & Zappavigna, 2021).

The new iteration of the emoji that this study focuses on is the *reacji* (*reaction* + *emoji*). Introduced in 2015 by business communication app Slack (Crook, 2015), it is an emoji which the user selects to 'react' to a message, that is, "an emoji used to show reactions, e.g., on Facebook or Twitter" (Maxwell, 2020). Its primary goal was to enhance efficiency in messaging (Haughey, 2016), as may be inferred in the example in Figure 1 where different numerical emoji were used to respond to a poll.

Figure 1

A Poll on Slack (Haughey, 2016)



Achieving this goal has apparently been a success, with other instant messaging applications having enthusiastically followed suit in adding the reacji over the years. Social networking site Facebook, under Meta (formerly known as The Facebook Company), adopted this initially as a feature in its public posts in 2016. Six graphicon¹ expressions, represented by modified versions of Unicode emoji (Tian et al., 2017), were integrated as extensions of the "Like" button, enabling users to 'react' to content on their News

¹*Graphicons* (*graphical* + *icons*) are "graphical devices found on contemporary social media platforms" and include "emoticons, stickers, GIFs, images, and videos" (Herring & Dainas, 2017, p. 2185). It must be noted here that emoticons—"string(s) of keyboard characters that, when viewed sideways (or in some other orientation), can be seen to suggest a face expressing a particular emotion" (Danesi, 2009, p. 110, as cited in Jibril and Abdullah, 2013)—are usually automatically rendered as emojis in Messenger (Dolot & Opina, 2021). For example, the emoticon suggesting a tongue-out expression (:-P or :P) is displayed as \mathbf{e} when sent.

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Feed pages. In recent efforts to enable users to express solicitude during the COVID-19 pandemic, a new "Care" reaction emoji was added in 2020 (Lunden, 2020). These seven are displayed below in Figure 2.

Figure 2

Currently Available Reaction Emojis on Facebook (Meloni, 2020)



Note. From left to right: "Like", "Love", "Care", "Haha", "Wow", "Sad", and "Angry".

Meta's instant messaging app Messenger then adopted the reacji feature in 2017, although only with seven emoji characters similar to the ones depicted above. These are shown and compared with the current reaction designs (for Windows 10) in Figure 3.

Figure 3

Initial Versus Current Selection and Design of Messenger Reactions

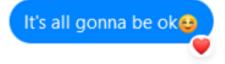


Note. The top row is taken from Go (2020), showing the previous set of Messenger reacjis. The bottom row is a screenshot of the current iteration of Messenger reacji; note the plus sign that denotes the customizable feature of the panel.

In October 2020, all emoji were made available as reactions, along with the addition of a customizable panel for personally preferred emoji (Go, 2020). As with the original Slack reacji, in using Messenger Reactions, users may specify their sentiments in reacting to messages, acknowledge others, and express themselves in a "lightweight way," attesting to the efficiency of the feature (Moxon, 2017). Figure 4 is an example of a Messenger reacji.

Figure 4

Messenger Reacji Affixed to Message



In the example above, the reacji is the heart which appears at the lower right corner of the message rather than right below it (cf. Slack example in Figure 1). Besides the positioning, notice that the Slack reacji and the Messenger reacji differ in size. The former

is smaller than the standard emoji present in the message, while the same size is retained in the latter. Furthermore, Messenger limits the user to one reacji, while Slack allows more than one. In both apps, the name of the person who had performed the reaction is identifiable.

This study looks at the behavior of the reacji as a linguistic and paralinguistic tool and will determine how its functions differ from that of the standard emoji, using concepts from conversation analysis (henceforth CA). The variables mentioned will be observed through analyzing the messages of Filipino users, myself included, on Messenger. This data context is expected to provide a wealth of insight into the use of the reacji since Messenger is exceedingly popular in the Philippines, an observation noted even by Loredana Crisan, the head of Messenger at Meta (Mateo, 2022). Furthermore, emoji are the most used graphicons by young Filipinos on said platform (Dolot & Opina, 2021).

Originally crafted for studying spoken conversation, CA has been applied successfully by scholars to CMC (e.g., Gibson et al., 2018; Meredith, 2017; Nishimaki, 2014; Zaferanieh, 2012). In fact, it has helped to establish analytical means for identifying the affordances of technologies in interaction (Tudini & Liddicoat, 2017). The example by Schegloff (1968, 1979), one of the first proponents of CA, of a ringing telephone signifying the beginning of a conversation demonstrates that "the technology itself is a significant constituent of the interaction" (as cited in Tudini & Liddicoat, 2017, p. 2). The latter authors then infer that different user features alter the manner of online conversation. It is thus important to note the formal qualities of the reacji feature, as I have done so above, albeit only as a prelude.

A CA methodology for online conversation has in fact been proposed (Giles et al., 2015), known as digital conversation analysis (DCA). The term mainly refers to an analytical orientation that uses more or less the same concepts as CA while taking into account the general nuances of online conversation, such as the asynchronicity of online chat (Giles et al., 2015). It forms a young research field with its own issues that have yet to be resolved (Jucker, 2021)—issues which involve changes in terminology (see Meiler, 2021). I choose to use the traditional terminology, however, since it has been proven to be sufficient in many studies in their analysis of online talk. Though this may somehow incline the analyst to eventually compare online talk with face-to-face communication, it is not an unwelcome orientation in this study.

Furthermore, I do not mean to directly apply CA to the data gathered. Instead, only several rudimentary concepts would be borrowed to substantiate this preliminary analysis of the reacji, while of course keeping in mind that its technical features fundamentally distinguish it from the objects of analysis for which they were originally formulated (i.e., face-to-face talk).² I thus leave it to further studies to discuss reacji according to any revised terminology of DCA.

²Studies such as Sampietro (2021) show that concepts of traditional CA still may be applied to CMC, even after the introduction of DCA. Despite specifying that she used the latter, her analysis depended heavily on the traditional concepts, and still proved successful.

1.1 Research Objectives and Research Questions

In exploring the application of CA to online talk, Giles et al. (2015) remarked that researchers should always remember the intrinsic relation between each piece of data and the online software from which it was culled. In other words, the technical environment offered by messaging applications must be taken into account in this type of research. This leads us to the notion that the reacji, becoming relevant in conversation only through a software feature, behaves differently from the standard emoji, which possesses broader areas of use. The primary goal of this study, therefore, is to identify the linguistic and paralinguistic qualities that distinguish the reacji from the standard emoji using concepts from CA as analytical tools. It seeks to answer the following:

- How does the reacji figure in online conversation, as opposed to the standard emoji?
- What communicative needs does the reacji fulfill that the standard emoji cannot (and vice versa), and how are these needs fulfilled for each?

Furthermore, while CA emphasizes an inductive orientation, in this research, I will also investigate two prior observations of mine. These would form the secondary objectives of this study. From my experience of using the Messenger app before and after the launch of the reacji feature, I have noticed that users are less inclined to produce textual replies while still affording to remain amicable; and that the feature results to the minimizing of disruptions, hence also allowing extensions of a speaker's turn. I stress again that these are not strict, confining hypotheses; according to the bottom-up nature of CA research (Seedhouse, 2005), the data—and not any prior assumption, no matter how informed—must eventually determine the outcome of the research.

1.2 Significance of Research

Previous studies have focused on the pragmatic functions of emoji in tweeting, instant messaging, and reacting to Facebook posts (e.g., Barbieri et al., 2016; Giuntini et al., 2019; Sadia, 2004). As of this writing, there is as yet no published work focusing on the reacji as it is used in online private messaging. Additionally, in terms of framework, many researchers have already employed other perspectives related to semiotics (e.g., Sadia, 2018) in their analyses of emoji, with the context-oriented CA approach being a less popular choice (e.g., Gibson et al., 2018; Sampietro, 2021). While this study will use CA concepts, the semiotic nature of emoji cannot be ignored, so this study also gives insight as to how the semantics and context of emoji are undoubtedly interconnected. I thus hope to eventually contribute to our understanding of how emoji and other features are adapted technically to address the conversational problems that characterize online conversation.

The remaining content of this draft is thus organized: Section 2 discusses the literature relevant to the present study, and Section 3 outlines the research methodology. These are then followed by the data analysis and discussion of findings in Section 4, and the conclusions and recommendations in Section 5.

2 Literature Review

Studies on emoji have burgeoned in a variety of disciplines all throughout the past decade until now, so I will limit this literature review to the studies within the field of linguistics, with special attention to semantics, syntax, and pragmatics. Bai et al. (2019) provided a good summary of emoji-related linguistic research. They noted that studies in this field tend to comment on emoji as a paralanguage, and as "non-verbal clues" of communication (p. 3). With discourse analysis as a popular framework, findings among these studies usually confirm how emoji augment speech acts and the interaction process. Furthermore, emoji have been proposed as capable of being used as an independent language. In these studies, results suggest how emoji are equivalent to morphemes of ordinary language. Yet, researchers are divided on whether they can truly form a distinct language devoid of text (Alshenqeeti, 2016; Ge & Herring, 2018; Makhachashvili et al., 2022).

In this brief review, I shall first summarize key ideas in the literature relating emoji to the three linguistic branches of semantics, syntax, and pragmatics, in that order. I then briefly gloss over what has been written so far about the reacji, and then conclude with how this study shall contribute to our current knowledge base of emoji.

2.1 Emoji and Semantics

Emoji are commonly analyzed in the literature in terms of emotional expression within online interactions (Gesselman et al., 2019; Wagner et al., 2020). The literature has also tended to present emoji as the digital substitutes of gestures and other paralinguistic elements of spoken communication (Danesi, 2016; Giles et al., 2015; Logi & Zappavigna, 2021; Tian et al., 2017). Studies in this field have proven that, just as gestures presumably differ in meaning, emoji semiotics and semantics are also essentially multifarious. To begin with, emoji are rendered differently via Unicode based not only on the specific apps and software used but also on the versions of such. This has been found to be conducive to miscommunication, since a cross-platform translation of emoji basically occurs (Miller et al., 2016). For instance, the emoji with the CLDR Short Name³ 'face with hand over mouth' has a blush in Apple devices () but none in Samsung devices ().

Moreover, interpretation still varies among users even for the exact same Unicode rendering of an emoji (Miller et al., 2017). As a recent example, Makhachashvili et al. (2021) analyzed the semiotics of \bigcirc 'grinning face with sweat,' which they showed as mainly signifying "joy," "laughter," and "inconvenience," according to questionnaire data. The concepts of "stressful," "sincere," and "unexpected," among others, were

³CLDR refers to the Unicode Common Locale Data Repository, which "provides key building blocks for software to support the world's languages" (Unicode, n.d.). For researchers, it is important not to let the names given to the emoji interfere with analysis (Logi & Zappavigna, 2021). For this paper however, I will still make use of the CLDR names obtained from version 15 of the Unicode emoji list https://unicode.org/emoji/charts/full-emoji-list.html for convenience; they will be set off by single quotation marks (''). It must be noted that Messenger updates its emoji repertoire independently of the Unicode list on the said website.

also proposed by respondents. Interpretations may in fact be influenced by user-based factors such as professional career, preference of apps used, and languages spoken (Makhachashvili et al., 2022). These are all in line with the earlier findings of Miller et al. (2016), who noted the ambiguity of emoji in terms of both sentiment and semantics. Sentiment here refers to a polarizing quality, i.e., whether positive, negative, or neutral. Semantics, on the other hand, refers to the interpretation given by the speaker. And just as meanings of words change, the evolving semantics of emoji has also been recognized, with the first longitudinal study on semantic shift of emoji from 2012 to 2018 by Robertson et al. (2021).

2.2 Emoji and Syntax

Konrad et al. (2020) note a broader function of emoji: their utilization in modifying linguistic text, in which we can see the semiotic and semantic import of emoji beyond emotional expression. Tian et al. (2017) agree that "emojis and the linguistic text can modify the meaning of each other" (p. 12), and summarized the six ways in which emoji interact with words and phrases. These are presented below (p. 12):

- replacing words/phrases, e.g., I want have [sic] a 🝺.
- adding accent or emphasis by repeating a word/phrase, e.g., *Take note Sam*, *this is how you season food, you are almost done there babe. Like you did the chicken* the *other nights.*
- expressing emotion independently from the text, e.g., (Facebook update from survivor of the Florida gay club shooting June 12, 2016) *I am safely home and hoping everyone gets home safely as well.*
- enhancing the emotion implied in a text, e.g., *This would probably be really good*. 😊
- modifying the meaning of a text, e.g., *I bet you are enjoying your revision* $\boldsymbol{\boldsymbol{\omega}}$.
- for politeness, e.g., *Can you please cook us something that I tag you in instead of your 4am pastas? Thanks.* \mathfrak{s}

These examples demonstrate what Makhachashvili et al. (2022) consider a recent trend in linguistic research: the "semiotically complicated text" (p. 142). Users suggest that emoji influence lexicon rather than grammar (Qureshi et al., 2021), but there is also evidence that they indeed play a role in syntactic relations. Grosz et al. (2021) proved this by using formal semantics to explain how *face emoji* (those that suggest facial expressions, e.g., \bigcirc 'face with rolling eyes') differ from *activity emoji* (those that represent objects and actions, e.g., \bigwedge 'person walking') in their in-text behavior. They note that the former has a first-person indexical property, serving to express the attitude of the author; while the latter has an anaphoric one, tending to refer to some other entity represented in the accompanying text. Here it is again evident that the semantic components of emoji go beyond that of emotion. It will be useful to keep this in mind in exploring the role of the reacji.

2.3 Emoji and Pragmatics

These context-based findings emphasize the influence of the surrounding text rather than the putative denotation or connotation of the emoji. This verbal context, then, serves as the determiner of the function that the emoji fulfills.

Gibson et al. (2018) employed principles of CA methodology to illustrate the importance of context in understanding the role of the standard emoji. Their results confirm the ambiguity in emoji interpretation, especially with face emoji. They cited studies such as Miller et al. (2016) whose survey revealed miscommunication and confusion among respondents concerning such emoji. Thus, there is not always a clear fit "between the emoji's communicative function and their possible meaning" (Gibson et al., 2018, p. 95). In the conversations they analyzed among Chinese users on Weibo, the function of the emoji in question (i.e., the laughing token \mathfrak{S} 'face with hand over mouth') was determined not by any preconceived understanding of what the sign meant but through the text itself, as well as through its placement along the lines of text.

Miller et al. (2017), however, revealed that the textual environment of emoji still fails to mitigate its ambiguity. According to their findings, some emoji actually became more ambiguous when used alongside text versus when regarded in isolation. Reasons include the possible element of sarcasm, or that the text is too short to give proper context. A limitation of their study, however, was that they examined their data only in terms of sentiment rather than semantic factors (unlike Miller et al., 2016), since it eased their burden of analysis and interpretation. That is, open-ended responses about the meaning of emoji as collected from respondents are more difficult to interpret statistically since they are not measured with a scale as with sentiment.

If emoji carry a variety of meanings, they also play a variety of pragmatic roles. With the questionnaire as a popular choice for eliciting data for determining these roles, research shows that emoji are used by conversationalists not only to express emotions but also to emphasize or soften messages, clarify jokes, enliven conversations, and add cuteness (Dolot & Opina, 2021; Konrad et al., 2020; Qureshi et al., 2021). They are also used to denote celebration, to respond to thanks and to compliments, and to mark opening and closing of conversations (Al Rashdi, 2018). Sampietro (2021) proved using CA fundamentals that the if face with tears of joy' emoji functioned to elicit laughter when used at the end of a piece of text. It also signaled acceptance of the invitation to laugh when used standalone and in a series. Lastly, Konrad et al. (2020) also associated emoji with "acknowledgement" and "speed or convenience" (p. 225), themes which will be further explored in this study. This list of functions is by no means exhaustive, and we can only expect further additions to it as technological platforms continue to offer new applications for the emoji—par excellence of which may be the reacji, so far.

2.4 The Reacji

The most insightful discussions on reacji were, for a time, limited to promotional blog posts and articles (Halp, 2019; Peters, 2020). Kokovina (2022), in her study of modern English buzzwords, seems to be the first academic study to mention the term. This

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lexicographic study notes neologisms that have been added to the Macmillan Online Dictionary and the Global Language Monitor, with "reacji" having been added in the former. As it was conferred the buzzword status, Maxwell (2020) from Macmillan also wrote a special article in its honor. In it, she noted one of its oft-cited advantages: that of reducing communication noise (see also Halp, 2019).

Usage of the term is still in its infancy, however. The following works in which the reacji makes an appearance simply refer to it as an emoji. The first of these is Meiler (2021), who used CA to explain storytelling in online conversation. While he deliberately disregards the reacji in his analysis due to its uncommon occurrences in his dataset, he noticed one of its most important technical limitations: the absence of a timestamp. This exemplifies the quasi-synchronous quality of online chat (Garcia & Jacobs, 1999) and may offer insight to the analysis of this study.

Next is the study of Dolot and Opina (2021), which surveyed the use of graphicons among young Filipino users on Messenger. Following Herring and Dainas (2017), they listed "reaction" as a function of emoji and showcased the reacji in this regard. While the reacji is in essence an emoji, my study takes a different perspective from theirs by treating the reacji differently from the standard emoji. This is mainly because the function of "reaction" may also be illustrated through merely typing (or selecting from the emoji keyboard) and sending the emoji as a standalone, rather than through the procedure of tapping and holding⁴ in order to react. Further, standalone graphicons were the example given by Herring and Dainas (2017) for this function. Another issue would be how the size of an emoji may affect interpretation, since standalone emoji when sent as messages are of a considerably larger size than when used in-text (Miller et al., 2017). The reacji remains the same size as the text, so this is a technical factor that distinguishes the reacji from the emoji.

2.5 Summary

If I were to choose one word to summarize the current knowledge on the nature of emoji, it would be "various." First, in the area of semantics, we have seen how emoji use allows both sentiment and semantic ambiguity. Then with regard to syntax, the emoji has been shown to interact with the text in various ways depending on what kind of emoji it is. And lastly, emoji have been shown to exhibit various pragmatic roles according to when, where, and why it is used in online talk.

Furthermore, I noticed that emoji studies usually employ computational and quantitative methods. With easily accessible, cloud-based communication exchanges (and their agents) as data subjects, it appears to be a thoroughly data-driven sphere of research. Questionnaires are also utilized to support and confirm findings, but the digital sophistication of techniques as used in this field is more notable. And only rightfully so, since digital materials are used as main sources of data.

This study, then, likewise emphasizes the importance of empirical observation, a principle in traditional CA (Seedhouse, 2005), due to the collected data. It also takes a more

⁴On a desktop, the same is accomplished by clicking a gray emoji icon that appears beside the message, which then presents the user with a panel from which the reacji is selected.

qualitative approach, however, with examples and insights from the users themselves, especially with the added analytical method of autoethnography. These means offer the insights sufficient to clarify both the semiotic and context-dependent nature of the emoji in the form of the reacji, and will show how this latter feature fulfills the communicative necessities that the standard emoji fails to meet.

3 Research Methodology

This study examines the difference between the reacji and the standard emoji using concepts from the Conversation Analysis (CA) framework. Borrowing concepts from approaches such as CA in analyzing communicative systems—the system of emoji, in this case—would enable us to take into account important context-based issues (e.g., cultural competence), according to Gibson et al. (2018). Theirs was an effective online reduplication of classic CA: it essentially involved "treating associative meanings of emoji as irrelevant to the action unless/until they can be demonstrably shown to be of importance to the interlocutors" (p. 97). Below, I outline the fundamentals of CA and four relevant concepts from the framework that inform the methodology for this research.

3.1 Conceptual Framework

While emphasizing the order of interaction, the Conversation Analysis (CA) approach is focused on representing speech in terms of "social acts" (Seedhouse, 2005, p. 165). Participants are depicted as monitoring and manipulating grammar and lexicon in order to accomplish such acts (Schegloff et al., 2002, as cited in Seedhouse, 2005). Conversation analysts concern themselves with the "demonstrable construction of meaning in interaction" (Gibson et al., 2018, p. 93). Seedhouse (2005) summarized its four principles, namely:

- 1. There is order at all points in interaction (Hutchby & Wooffitt, 1998).
- 2. Interactions are context-shaped and context-renewing.
- 3. No detail is "disorderly," "accidental," or "irrelevant" (Heritage, 1984).
- 4. Analysis is driven by data, i.e., any theoretical assumption about the context of participants is unwelcome unless expressed by the participants themselves in interaction.

He also summarizes four "interactional organizations" (p. 168) from CA, namely: (a) adjacency pairs, (b) turn-taking, (c) preference, and (d) repair. I briefly explain them below in considering the function of the reacji.

3.1.1 Adjacency Pairs

Sequencing in face-to-face conversation is normally characterized by adjacency, or spatial immediacy, of utterances. This is not so in the case of online chat because of the inability of participants to control the placement of their turns (Herring, 1999). For example,

when two online interlocutors press the "Send" button at the same time, either message may log into the thread first because of technical factors (e.g., internet connection). This may cause logical incoherence in the flow of the conversation.

An *adjacency pair* is a two-part structure of spoken material with the following features: (a) it is the length of two utterances, (b) there is an adjacent positioning of component utterances, with (c) different speakers as the source of each utterance (Schegloff & Sacks, 1973). The first one acting as the prompt is termed the *first pair part* (FPP), and the following reply that satisfies it the *second pair part* (SPP). This construction results in various pair types; examples include the question-answer, greeting-greeting, and offer-acceptance/refusal templates (p. 296).⁵ As a conversation is continued, the relevance of each subsequent reply to the previous utterance allows adjacency pairs to provide understanding of coherence in interaction (Tudini & Liddicoat, 2017).

3.1.2 Turn-taking

Turn-taking is the "organizing participation of interlocutors in talk" (Liddicoat, 2011, as cited in Tudini and Liddicoat, 2017, p. 416). Sacks et al. (1974) outline several components and rules that govern the conversation to prevent gap and overlap. Fundamental and of relevance here are the concepts of *turn constructional unit* (TCU) and *transition-relevance place* (TRP). While the former refers to any "sentences, clauses, phrases, and one-word constructions" that occur within a speaker's turn, the latter occurs at the closure of and marks the "completion points" (p. 721) of such utterances, signaling the turn of another speaker.

3.1.3 Preference

Preference bears no conceptual relation to personal inclinations of the participants in a conversation. Rather, it is a generic concept that refers to the tendency for interaction to tend towards social solidarity (Seedhouse, 2005). The SPP of an adjacency pair may be selected from several choices, and whether or not these choices lean towards agreeability among interlocutors is what preference organization is concerned with. For example, accepting, rejecting, and ignoring are possible responses to an invitation. Accepting an invitation, as a socially favorable act, is a preferred action, the likes of which are implicitly motivated by an aim towards sociability (Pomerantz, 1984, as cited in Bilmes, 1988). With regard to form, these are usually given promptly and without hesitation (Seedhouse, 2005). On the other hand, SPPs marked by delay and that merit justification, or that have to be "qualified" or "accounted for," are examples of dispreferred actions (Heritage, 1984, p. 267). They are also preceded by fillers such as "um" or "well" in English. They are also disaffiliative, i.e., opportunities for conflict (Seedhouse, 2005); while affiliative, or

⁵Nurhayati et al. (2020, pp. 84–85) offered an exhaustive list of pair types. Besides the three mentioned above, they included (a) request-agreement; (b) assessment-agreement; (c) compliment-acceptance; (d) leave-taking adjacency pairs; (e) complaint-apology; (f) warning-acknowledgement; (g) blame-denial; and (h) threat-counter-threat. Rüegg (2014) also considers a thanks-thanks response exchange as an adjacency pair.

preferred actions, are used to avoid it. Like the other concepts, preference organization is "strongly institutionalized" in human interaction (Heritage, 1984, p. 267).

3.1.4 Repair

The concept of *repair* refers to utterances made to address "problems in speaking, hearing, and understanding" (Schegloff et al., 1977, p. 361). These include the echoing of elements of statements of the conversation partner, or prompts such as "hm?" In these two instances, repair is most common in the form of a question, but any declarative utterance of clarification also counts as repair.

3.2 Data Collection

The data sources are six (6) dyadic conversations between myself and six of my friends. I henceforth use the following pseudonyms: Elle, Leonora, and M.Love for the female respondents; and Dexter, Derrick, and Chris for the male respondents. Pieces of data are thus samples of messages—conversation exchanges in which I and my conversation partner have either included at least one (1) emoji, or have reacted to using at least one (1) reacji. First in the criteria for conversation selection was that they are above 18 years old, and I obtained casual consent from these people for me to use our entire conversation history as data sources. Then, the selected exchanges are only those starting from 2017 to limit the data sources to the time when the reacji feature had already been made available.

Upon receiving their initial consent, I selected specific conversation exchanges and removed or omitted sensitive material in transcribing them. The transcriptions, presented in table form, constitute the primary data for this collection method and depict the reacji as a response. To illustrate, a transcription of the message in Figure 4 is shown below in Table 1.

Table 1

Transcription Example		
01	Participant 1 — Apr 4, 2023 10:24am	
	It's all gonna be ok 😊	
02	Participant 2	

The first column shows the ordinal numbering of TCUs in the interactional exchange. The second column holds the names of the participants, time stamps of the message, and message per se, and the third will hold the English gloss and/or explanatory notes if needed.

The transcriptions include as much as possible of the entire exchange (i.e., a conversation centered on a specific topic) in order to supply sufficient context. The selected messages and their corresponding reacji had been sent and encoded in Messenger before the time I had informed the participants of my study, in order to prevent the observer effect. After obtaining initial consent from my respondents, I sent to them via email the transcriptions along with the informed consent form, which they reviewed and signed, respectively. After which, I proceeded to analyze the data, and then confirmed my interpretations by sending back to the respondents annotated copies of the transcriptions for their verification. Upon review, they then sent these files back to me.

Besides the messages, an interview was also made optional. Two (2) male respondents, Dexter and Derrick, were able to participate in this and gave me further insight as to their own emoji and reacji use.

3.3 Limitations and Scope of Research

I acknowledge that this study oversimplifies CA concepts for the sake of applying them loosely to its data. Thus, it emphasizes how online conversation mirrors that which occurs face-to-face. While this is not entirely discouraged (see Sampietro, 2021), the suggestion (see Meiler, 2021) to use the more digitally relevant revisions of concepts mentioned in this paper may be more advisable on the whole. These may then be utilized by future research.

Also, because I used convenience sampling and depended on recent conversations from the past five years, the respondents are all young, college-age Filipinos. This must be taken note of because as members of this demographic are the ones who spend more time on social media, they are also most likely to have updated apps and be thoroughly acquainted with emoji use. Furthermore, the emoji used in the transcriptions are the renderings on the desktop version of Messenger for Windows 10, which may appear different across other types of applications, devices, platforms, and updated versions. There is thus the uncontrollable factor that some of the emoji may have appeared differently as my respondents had used (or continue to use) them. Findings may also differ should conversations in other apps be analyzed. These variables may then also serve as impetus for further studies.

I noted the aforementioned issues because this study aims for a more descriptive rather than correlational orientation, and to furnish preliminary observations and insights only. It is also not a corpus study, and should not be taken to be statistically representative of the emoji use in this age group.

4 Data Analysis and Discussion of Findings

The data collection was governed by questions of how the reacji behaves differently from the emoji, though parallels were found to figure prominently between them too. Since I was also a participant of the conversations, I also utilized autoethnography, a qualitative research method that focuses on the experiences of the author to create nuanced and compelling narratives (Poulos, 2021). These are rooted in one's experience as a member of a specific culture and thus produce epiphanies that help in understanding it (Ellis et al., 2011). Thus, as a member of the Messenger community, I analyzed my own use of the reacji as well.

I will first show the findings relating to the four CA concepts discussed above. I will then list the findings that go beyond these concepts, which focus on the similarities between the emoji and reacji.

4.1 Data According to the Four Interactional Organizations

4.1.1 Adjacency Pairs

Both emoji and reacji can function as the SPP, i.e., the answer to a prompt, but this occurs more often with the reacji. Emoji had been used as the SPP only thrice in the data, one of which is this example from Leonora, shown in Table 2.

Table 2

Serie	s of Emoji Used as an SPP	
09	Leonora — Dec 9, 2018 7:38am Thank ü 😊	
10	Researcher — Dec 9, 2018 7:38am https://www.youtube.com/watch?v=YRqxKmG9ivU <i>Hating Gabi</i> – <i>Conching Rosal</i>	
11	Researcher — Dec 9, 2018 7:41am Medyo fuzzy but beautiful nevertheless 😊	Kinda fuzzy but beautiful nevertheless 😊
12	Leonora — Dec 9, 2018 7:41am	

Note how the four insertions of $\stackrel{\mbox{\tiny CU}}{=}$ 'grimacing face' followed by one of $\stackrel{\mbox{\tiny CU}}{=}$ 'beaming face with smiling eyes' constitute a single TCU in response to my comment.

While similar instances are rare in the data, the use of reacji as SPP permeated all six conversations. Observe the next data sample shown in Table 3. Chris confirmed during data verification that he did intend the "folded hands" emoji to represent the statement "hopefully this is true." While this may still be seen as an expression of mere sentiment, the fact that emoji can take the place of text, as observed by Tian et al. (2017), is highly plausible.

Furthermore, the impossibility of overlapping messages in a chat thread is more or less satisfied with another feature that enables users to reply directly to a prompt from another interactant, with the prompt attached to the new response. We see a reverse orientation with the reacji; as the SPP, it is attached to the FPP, so it follows the terms of adjacency positioning in the visual sense more exactly than a regular emoji TCU. This is then related to my initial observation that users are less inclined to produce textual replies, for the reacji becomes the second half of the adjacency pair. While mere display of sentiment is not acknowledged as utterance in CA, Facebook equates its six reacjis with actual words, e.g., defining the defining the definition of the words of evidence for emoji reinterpreted as text. Observe the suggestion in Table 4.

Hi [NICKNAME], good morning! I'm just gonna ask if you have already received an email from [TEACHER]?

Ooh none, is there already one? :0

None also actually haha just

overthinking because class is tomorrow already HAHAHA

Let's check CRS [*Computerized Registration System*] *as well hehe*

Table 3

The Rea	1C11 as	SPP

01–03	[OMITTED MESSAGES]	
04	Chris — Dec 4, 2022 11:21pm Di naman galit si baran ?	I hope wasn't mad?
05	Chris — Dec 4, 2022 11:21pm Huhu had an event to attend kasii	Huhu it's because I had to attend an event
06	Researcher — Dec 4, 2022 11:38pm [REPLY TO 04] Hahaha hindi naman, parang amused lang, in an understanding way!	Hahaha not really, just somewhat amused, in an understanding way!
07	Chris [reacji]	

Table 4

Reac	Reacji to Suggestion	
01	M.Love — Mar 1, 2021 9:36am Hi Maran , good morning! Ask ko lang kung may nareceive ka na bang email from Maran ?	
02	Researcher — Mar 1, 2021 1:50pm Ooh wala, meron na ba? :0	
03	M.Love — Mar 1, 2021 1:51pm Wala rin actually haha naooverthink lang kasi bukas na class HAHAHA	

- 04 **Researcher** Mar 1, 2021 8:36pm HAHA okey, thats good to know hahaha dont worry dearrr

In 07, the \diamond 'OK hand' emoji was used to respond to the suggestion to check CRS. Evidently, it may be read as a stand-in for the accepting statement "OK" or "alright." I had also asked in the interview for any questions or prompts to which reacji may be attached to as a sufficient response. According to Derrick, simple requests are the most likely, to which he would use a \diamond 'thumbs up.' Dexter, on the other hand, proposed a more contextualized prompt: if someone asked how he was doing with regard to academic requirements, he would then use the \mathfrak{G} 'face holding back tears.'

Note, however, that this SPP feature also depends on the reacji used. In Table 5, the 'thumbs up' reacji is not an SPP.

Table 5

When	When a Reacji Is Not an SPP	
01	Researcher — Apr 14, 2023 11:15am Seems sunny today 🙂 see you at 3?	
02	Elle 🡍 [reacji]	
03	Elle — Apr 14, 2023 8:11pm Yea, see you at 3. 🙂	
07	Researcher ♥ [reacji]	

Here, the reacji is indeed merely an emoji functioning as a reaction, as observed by Dolot and Opina (2021). It is not an SPP since the latter was furnished in 04 with the response "yea." Moreover, because the adjacency pair is defined as having the length of two utterances only, the reacji (in 02) is a separate utterance from the text (in 03); it may be said to supplement or preface it, rather than being the SPP per se with a follow-up text message. Lastly, should it be considered the SPP on grounds of chronology and literal adjacency, it would still be difficult to tell if it was a response to the assessment "seems sunny today" or to the question that followed. Thus, 03 contains the more likely SPP.

Pair Types One of the more common pair types that I noticed in the data is the suggestion-approval template, as may be seen in Table 6.

Table 6

	• •	
Reac	ii in Suggestion-Approval Pair Type	
25	Researcher — Dec 17, 2022 9:14pm	
	[REPLY TO 14] Kahit ngayon na if it's alright, para	We can do it [division of tasks] now if
	makapag-practice na hehe	that's alright, so we can start
		practicing already hehe
26	Chris	
	V [reacji]	

Here, Chris added the reacji to signify his approval to my proposal for a project which he and I were working on. The new information-response template ("Adjacency Pairs," 2022) may also be seen in the text-reacji interaction, as shown in Table 7.

Here, Derrick showed his acknowledgment of the new information that he had wanted to know. The reacji is thus seen to be effective in showing acknowledgment, as described by Konrad et al. (2020).

Table 7

Reacji as	Response	to New	Information

10	Derrick — Sep 22, 2022 11:17am i read a little yesterday
11	Derrick — Sep 22, 2022 11:17am for my paper hahaha
12	Derrick — Sep 22, 2022 11:18am What're you doing?
13	Researcher — Sep 22, 2022 11:18am Oh ok haha, just submitted my abstract
14	Derrick 🖕 [reacji]

Reacji are also seen as the SPPs in leave-taking adjacency pairs, also called degreeting degreeting response templates ("Adjacency Pairs," 2022). Here in Table 8 then is an example.

Table 8

Reacji as Degreeting Response

10	Leonora — Jan 22, 2023 4:30pm ill ask sina mama :> ill get back to youuu 😄	I'll ask mama [implied: both parents] :> I'll get back to you $\stackrel{\bigcirc}{\hookrightarrow}$
11	Researcher V [reacji]	

Here the heart functioned as an acknowledgment as well as a close to the conversation. The emoji plays this role as well, but much rarer than does the reacji. Observe Table 9, where it may be seen as an SPP to the 💗 'growing heart' reacji.

Table 9

Emoji as Degreeting Response

04	Researcher — May 21, 2020 4:22pm	
UT	Kumusta naman nyaha	So how have you been haha
05	Leonora — May 21, 2020 4:23pm ehe im doing fine. keeping myself busy :)) hbu?	
06	Researcher — May 21, 2020 4:24pm Same lol	
07	Leonora ♥ [reacji]	
08	Researcher — May 21, 2020 4:24pm	

Given the wide scope of pair types to which scholars add freely, I will also add one more from my data. This is the encouragement-gratitude template, which may be seen primarily with 02–03, and in 06–07 in the sample in Table 10. Since Chris replied

「頑張りましょう」 'let's do our best' (in 06) to the same (in 04), the heart reacji in 05 did not function as the SPP to 04. The TCU of 03 is thus the valid SPP to the Bible verse in 02, which may be taken as a statement of encouragement.

Table 10

Reac	ji as SPP to Encouragement	
01	Researcher — Dec 13, 2022 4:47pm Chris, よろしくお願いします! 😂	Chris, I'm looking forward to working with you! 😊
02	Researcher — Dec 13, 2022 4:47pm "Through God we shall do valiantly, And it is He who will tread down our adversaries." Psalm 60:12	
03	Chris ♥ [reacji]	
04	Researcher — Dec 13, 2022 4:48pm 頑張りましょう!!	Let's do our best!!
05	Chris ♥ [reacji]	
04	Chris — Dec 13, 2022 5:08pm よろしくお願いします、ジュリアさん~! 頑張りましょう ☺	Looking forward to working with you too, Julia! Let's do our best 😂
07	Researcher V [reacji]	

Observe yet another pair type in Table 11. The two-part construction of a laughable element followed by laughter is also considered an adjacency pair (Schegloff et al., 1977). Here, I used the \mathfrak{s} 'grinning face with squinting eyes' emoji, also known as "Haha" in Messenger reactions, to accept Dexter's invitation to laugh with the laughing token. A secondary observation also may be made here, in that reacji are used to react to a certain segment of the TCU only. In this case, it was the laughing token itself.

4.1.2 Turn-taking

Both emoji and reacji can function as TRP, that is, they can both signal the next speaker's turn. In Table 12, it is seen with Facebook's "Like" icon, which doubles as an automatic response button on Messenger. Though distinct from h 'thumbs up,' it performs the same functions here.

Note that the file attachment is considered a turn and was then followed up with the emoji. This then prompted me to claim the next turn. If, on the other hand, the reacji is regarded as a wholly non-verbal expression, i.e., a mere reaction, it may also be thought of as a tool facilitating the extension of the other party's turn.

Laug	hable-Laughter Adjacency Pair	
01	Dexter — Mar 24, 2023 9:52am hi julia!! HAHAHAH	redacted: fun nickname for researcher based on preceding interaction
02	Researcher 😂 [reacji]	
03	Dexter — Mar 24, 2023 9:52am nahagilap niyo na ba ni mx Security si Security for the reporting niyo? XD	have you and Mx. already come across for your reporting? XD
04	Researcher — Mar 24, 2023 9:52am Henlo! Yes we're talking na hehe, why?	
05	Dexter [reacji]	
Tabl	e 12	
Етој	ii as TRP	
04	Researcher — Oct 25, 2018 2:42am Here Elle, please print if you can thank you!!!!	

- 05 **Elle** Oct 25, 2018 2:44am Sure
- 06 **Elle** Oct 25, 2018 2:44am I'm so sorry
- 07 **Researcher** Oct 25, 2018 2:44am [аттаснмент]
- 08 Elle Oct 25, 2018 2:44am
- 09 **Researcher** Oct 25, 2018 2:44am

It's ok 🙂 thanks again

Table 13

Extension of Turn Facilitated by Reacji

- 72 **Derrick** Dec 13, 2022 5:15pm thanks julia!
- 73 **Researcher** ♥ [REACJI]
- 74 **Derrick** Dec 13, 2022 5:15pm how are you doing ba?

how are you doing [QUESTION PARTICLE]?

Observe the exchange in Table 13. Note that Derrick continues talking after I respond to his thanks with a heart reacji. In chat threads, Meredith (2017) noted, "the persistence of text on-screen … affords … 'breaking up' of turns, as the recipient can deduce which turns 'fit' together through examining the record of the interaction as it appears on screen" (p. 47). The reacji, however, proved to simplify this process of "breaking up" by allowing listeners to express themselves during another speaker's turn. This then enables the extension of the turn of a participant in a group chat, in that they are able to send a series of messages or TCUs without being disrupted by their fellow interactants if they wish to acknowledge or answer a prompt. This is because they use the reacji to discreetly fulfill that function. In this regard, the reacji facilitates suspension of TRPs in the course of a Messenger conversation. And it does it more efficiently than the emoji, since the example of the latter in Table 12 is the only instance for emoji in the data.

4.1.3 Preference

In applying CA to online interactive learning contexts, Tudini and Liddicoat (2017) mention emoticons as "mitigating" elements in the dispreferred action of correcting the learner. I have found data concerning a similar role of both the emoji and the reacji.

Table 14

Emoji Used in Dispreferred Action

	, , ,	
01	Elle — Dec 16, 2017 6:08pm Hi,Julia 🙂 I just want to ask since your coming to the year end party will you be joining the games as well?	
02	Researcher — Dec 16, 2017 6:28pm Hi Elle! Hindi na tho. I'll just be eating with you guys. Hope it's fine with you 🙂	Hi Elle! Won't anymore tho. I'll just be eating with you guys. Hope it's fine with you 🙂
03	Elle — Dec 16, 2017 6:29pm Oh sige, yeah its okay 🙂its nice to have you come 😀	Oh sure, yeah its okay 🙂its nice to have you come 😃
04	Elle — Dec 16, 2017 6:29pm Thank you	
05	Researcher — Dec 16, 2017 6:42pm No problem 🙂	

Note the positive affect being offered by the presence of emoji, even though I had performed the dispreferred action of choosing not to join in the games. As for reacji, as regards the discouraged practice of "seenzoning" conversation partners (i.e., viewing their messages without replying to them), I have observed a similar mitigating quality of the reacji. Let us again recall how standard emoji function as a form of acknowledgment (Konrad et al., 2020).

Reacji for Preference		
10	Researcher — Mar 24, 2023 10:10am Salamat btw!	Thank you btw!
11	Dexter — Mar 24, 2023 10:11am yaaay!! thank u diiin!! :>	yaaay!! thank u alsooo!! :>
12	Researcher ờ [reacji]	

In the exchange in Table 15, \diamond 'OK hand' was used to close the conversation, and this confirms my initial observation that users produce quantifiably less textual replies while remaining amicable. It is interesting to note, however, that the fact that a reacji was used was not the only factor in the acknowledgment here. Dexter explained that had I used \diamond 'thumbs up' instead of \diamond 'OK hand,' I would have portrayed myself as asserting distance which would be a dispreferred action on my part. This semantic fluidity of the emoji according to its users thus echoes previous findings on its ambiguity (e.g., Makhachashvili et al., 2021).

4.1.4 Repair

The use of emoji and reacji was seen in applying repair, although only one instance for each. The difference is that the emoji was used after repair has been accomplished, while the reacji was used to introduce it.

Observe the former in Table 16. Here, at 09, Leonora used the emoji to embellish her textual response even though she had already used the umlauted letter "ü," which also functioned as a smiley. This may have added emphasis to her appreciation of the clarification accomplished.

In the case of reacji, it was used once in introducing the initiation of repair. The initiation in Table 17 is 10, where Elle repeats the word "accepted" from 08. Thus, it can be said that her use of : 'face with open mouth' preempted her doubt or disbelief at the new information, i.e., the fact that I would still have to undergo a selection process to be admitted as a dormer in the university. It then served as a first step in the confirmation process (in 10) that constitutes the initiation of repair.

4.2 Data on Other Similarities Between Emoji and Reacji

While I set out to pinpoint the distinguishing features of the reacji from the emoji, the inductive bent of CA behooves me to also document other observations that I had made beyond the four concepts of interactional organization. These are mostly functions and characteristics shared between the emoji and reacji, which are summarized below.

03	Leonora — Dec 9, 2018 7:36am	
	Hmmm thats alright we will work with what we have. Pero if that is the case can u also look for vocals on Sa Kabukiran?	Hmmm thats alright we will work with what we have. But if that is the case can u also look for vocals on Sa Kabukiran?
04	Researcher — Dec 9, 2018 7:36am the video I just sent has vocals. So for hatinggabi you mean?	
05	Leonora — Dec 9, 2018 7:37am Kasi diba may scene na mag eexchange ng music from Hatinggabi and Sa Kabukiran?	Because there's a scene where the music would exchange from Hatinggabi and Sa Kabukiran, right?
06	Researcher — Dec 9, 2018 7:38am yup	
07	Leonora — Dec 9, 2018 7:38am So both nalang has vocals	So both would just have vocals
08	Researcher — Dec 9, 2018 7:38am okiee	
09	Leonora — Dec 9, 2018 7:38am Thank ü 😄	

05	Elle — May 16, 2019 7:40pm
	When do you transfer to your dorm?? 😊
07	$\mathbf{D} = \{1, 2, 3, 3, 5, 5, 5, 5, 5, 5, 5, 5, 5, 5, 5, 5, 5,$

- 06 **Researcher** May 16, 2019 7:40pm Ooohhhhh
- 07 **Elle** May 16, 2019 7:40pm Helluuu
- 08 **Researcher** May 16, 2019 7:40pm Um if I get accepted, it will be around august
- 09 Elle
- 10 **Elle** May 16, 2019 7:40pm Accepted?
- 11 **Researcher** May 16, 2019 7:41pm Yeah limited din slots e

Yeah 'cause slots are limited too

4.2.1 Expressing Contradictory Sentiment

Firstly, they are used to juxtapose seemingly opposing sentiments within conversation. The nuance lies in the fact that the emoji was used to show a process, and the reacji was used to demonstrate underlying sentiment. The two following examples are from my conversation with Leonora.

Table 18

09	Leonora — Dec 9, 2018 7:38am Thank ü 😊	
10	Researcher — Dec 9, 2018 7:38am https://www.youtube.com/watch?v=YRqxKmG9ivU <i>Hating Gabi</i> – <i>Conching Rosal</i>	
11	Researcher — Dec 9, 2018 7:41am Medyo fuzzy but beautiful nevertheless 😊	Kinda fuzzy but beautiful nevertheless 😊
12	Leonora — Dec 9, 2018 7:41am	

As for Table 18, Leonora explained that at first, there was an expression of awkwardness with the four \bigcirc 'grimacing face' emoji, which then turned into a \bigcirc 'beaming face with smiling eyes' emoji. She agreed that it may have been influenced by the preceding message, which placed "fuzzy" and "beautiful" in the same order. However, she did also say, in reference to this particular instance, that she also does not give much thought as to how she uses some emojis. Thus, the motive of why she used the sentimentally contradictory emoji cannot be known for certain.

In Table 19 with the reacji, Leonora explained that emoji 😢 'crying face' was used to demonstrate that she was actually sad that she would not have been able to hang out with me. This evidently opposes the general mood of the conversation, hinting at how reacji can be used to express emotions beyond this mood.

4.2.2 "Contagious" Quality

Both emoji and reacji use are what I might call "contagious."

In Table 20, when I presented some favorable news to Elle (i.e., agreeing to adopt her guitar), she and I went on a spree of reacting to one another's messages with hearts. Here, 'red heart' was attached to each textual message. It is noteworthy that the heart also manifests in the text, alongside several face emoji. It may be observed here that the heart, while not indicative of any facial expression, is sufficient to display a significant amount of affection and seems very much prominent in expression of sentiment on Messenger. It prompts one's conversation partner to react in the same manner, maintaining the affectionate tone of the exchange.

Reacji and Opposing Sentiment

10	Leonora — Jan 7, 2020 10:34pm	
	HAHAHAHAHAHAHAHA friday din check in	НАНАНАНАНАНАНА
	mo? magcocommute lang ako e. if gusto mo sumama sa thursday 😁	Friday's also your check-in? well I'm just gonna commute. if you'd like to
		come along on thursday 😁
11	Researcher — Jan 7, 2020 10:35pm	
	Ohhhh may something kami on thursday kasi :<	Ohhhh well we have something on Thursday :<
12	Researcher — Jan 7, 2020 10:35pm sorry deahr	
13	Leonora — Jan 7, 2020 10:35pm	
	kaya pala friday ka na babalik KSKSKSKSKS 🖨 🖨	so that's why you'll go back on friday KSKSKSKSKS 😂 😂
14	Researcher — Jan 7, 2020 10:37pm yupppers hahaha	
15	Leonora 😥 [reacji]	

Table 20

Contagiousness of Reacji

23	Researcher — Apr 9, 2023 6:43pm	
	Good eve Elle! I'll take it na 😤 thanks so much for	Good eve Elle! I'll take it already 😤
	asking mee	thanks so much for asking mee
24	Elle	
	V [reacji]	
25	Elle — Apr 9, 2023 6:44pm	
	YAY! When are you free? I can drop it off at your	
	house 😂	
26	Researcher	
	V [REACJI]	
27	Researcher — Apr 9, 2023 6:46pm	
	Awww thank you!! 🤎 Maybe around this week,	
	but will let you know exactly when!	
28	Elle	
	V [REACJI]	
29	Elle — Apr 9, 2023 6:48pm	
	Okiiii, thank you for taking it 😁 🤎	
30	Researcher	
	V [REACJI]	

Moreover, Leonora shared that her conversation partners do indeed eventually adopt her own custom emoji the longer she talks to them. Observe how this notion is made manifest even in the short-term, and with Leonora herself.

Table 21

Cont	agiousness of Reacji	
01	Leonora — Feb 10, 2018 10:05pm Good evening Julia! Do you know the homework sa reading and writing? the essay thingy.	Good evening Julia! Do you know the homework for reading and writing? the essay thingy.
02	Researcher — Feb 11, 2018 8:35am Yup, what about it? We won't be writing the essay proper yet, it's just the planning stage. 😂	
03	Leonora — Feb 11, 2018 9:15am Oohh yeaaah thank you dear ☺ and sa marketing?	Oohh yeaaah thank you dear 😊 and for marketing?
04	Researcher — Feb 11, 2018 10:37am Marketing: send to ppt slides of the value proposition, positioning statement, and target market of your own company 😢	
05	Leonora — Feb 11, 2018 11:57am 😎 cool thanks gurl	

The samples noted in Table 21 are 02 and 03, with the similar \bigcirc 'smiling face' and \bigcirc 'smiling face with smiling eyes' emoji; and 04 and 05, where the \boxdot 'smiling face with sunglasses' emoji is echoed. This suggests that specific emoji use is easily consistent between interlocutors, as is the case with many other aspects of language, such as vocabulary.

4.2.3 Supplementing Text With Sentiment

Then, it is true that reacji enliven conversation alongside emoticons and emoji, as may be seen in Table 22. Notice how the exchange utilizes both emoticons (in 06 and 07), emoji (in 08 and 10), and reacji (in 09 and 11) to demonstrate the role of these graphicons. This role was twofold: to mitigate the dispreferred action of giving the "bad news" of deferring from the organization I had been applying for and in which M.Love is a member, as well as to celebrate the fact that the task which she had given me to do had been accomplished nonetheless. Dexter, moreover, noted how emoji is comparable to intonation in regular speech, and Derrick also observed that emoji and reacji help to simulate the atmosphere of a real-life exchange, furnishing a fun element by adding literal color to the conversation. This is in line with Bai et al.'s (2019) observation on the prominence of emoji as nonverbal tools.

However, this confirms the fact that emoji and reacji only serve to maintain sentiment in conversation. In the interviews, Derrick and Dexter had discussed the importance

Emoticons, Emoji, and Reacji in Conversation

06	Researcher — Nov 4, 2020 6:22pm Bad news is I decided to defer ;_;	
07	Researcher — Nov 4, 2020 6:23pm Yun, priorities e :((There, because of priorities :((
08	M.Love — Nov 4, 2020 6:24pm Oooohhh I see i see 🥺 yes I understand naman nga kasi huhu dami talaga pinapagawa sa acads ngayon huhuhu still, thank you for telling me! I appreciate it a lot 🥹	Oooohhh I see i see 🥺 yes I understand anyway really since huhu we're being made to do a lot with our schoolwork huhuhu still, thank you for telling me! I appreciate it a lot 🥸
09	Researcher ♥ [reacji]	
10	Researcher — Nov 4, 2020 6:28pm Thank youuu ♥ Good news is I was able to do the task naman	Thank youuu 🤎 Good news is I was still able to do the task
11	M.Love	

Table 23

Emoji Intensified by Text

09	Researcher — Oct 14, 2018 9:46am	
	Wait lang, there's an issue with my wifi. Just tell me when you have to go and prepare already 😂	Just wait, there's an issue with my wifi. Just tell me when you have to go and prepare already 😅
10	Elle — Oct 14, 2018 9:46am	
	Sure sure	
11	Elle — Oct 14, 2018 9:46am	
12	Researcher — Oct 14, 2018 9:53am Heerree	
13	Elle — Oct 14, 2018 9:53am There no file?	
14	Researcher — Oct 14, 2018 9:54am	
	Lol it's still sending haha	
15	Elle — Oct 14, 2018 9:54am	
	Ohh hahahaha 😂 😂 😂	

of text in their messaging, acknowledging that it still forms the bulk of content. For the former, a reacji usually has to be followed up with text, and the latter described his message content as being $\frac{3}{4}$ text and $\frac{1}{4}$ emoji.

A similar example pointing to the importance of text may be seen in Table 23 from Elle, where the sentiment of emoji is actually intensified by text. Here, the three \Leftrightarrow 'face with tears of joy' emoji in 11 and 15 vary in intensity according to Elle. While 11 contains emoji of a larger size, the ones in 15 depict her laughter to a greater degree because she used a laughing token alongside it. This finding may serve as an initial response to the suggestion of Miller et al. (2017) that the size of an emoji may affect its interpretation. Thus, that text is indispensable in online conversation makes the proposition of an emoji-only language yet a far cry, for these symbols mainly serve to embellish the text and provide the mood.

4.2.4 Varying Intensity

Another quality that emoji, and by extension reacji, have is that of varying intensity.

Table 24

Spec	ial and More "Intense" Emoji and Reacji	
10	M.Love — Mar 1, 2021 8:53pm Gandaaaa 🍟 Yes whooo Lord please help us! asdfghjkl thank you 🔤 , have a blessed sem!! 🤨 🎔	Beautifullll 🔩 Yes whooo Lord please help us! asdfghjkl thank you [NICKNAME], have a blessed sem!! 🥺
11	Researcher V [REACJI]	
12	Researcher — Mar 1, 2021 9:53pm Thank you 🥺 and amen!! btw, sabi ni during the assembly na it's also usual that profs will message on the day itself hehe. so we'll see!! God bless your sem ahead din 🤎	Thank you 😟 and amen!! btw, said during the assembly that it's also usual that profs will message on the day itself hehe. so we'll see!! God bless your sem ahead too 💛
13	M.Love [reacji]	
14	Researcher — Mar 2, 2021 6:48am ayan na meron na hehe	there, there it is already hehe
15	M.Love 🥰 [reacji]	
16	M.Love — Mar 2, 2021 7:40am Ayun! Thank youuu 🂖	There! Thank youuu 💖
17	Researcher [REACJI]	

Observe Table 24, an exchange with M.Love after I had shared an original song about a student's prayer. Notice the use of the 💖 'sparkling heart' in 10 and 16, and 🥰 'smiling face with hearts' in 15. In the example, M.Love explained that the latter was a more personalized form of a display for affection and she used it more for female

conversation partners. The sparkling hearts, on the other hand, also reflect a more heightened sentiment.

Indeed, Dexter shared that the emotional intensity of emoji, for him, is somehow structured as a gradient. This is related to the next observation, which is that of personalization and customization. M.Love, Leonora, Dexter, and Chris all discussed their personalized use of emoji and what several of these meant to them. This all reflected their self-appropriation of meaning. For Chris, he had his own meanings for \checkmark 'folded hands,' which ranged from referring to prayer, requests, or hope; these also varied based on whether it was used as a reacji or not. Thus according to the meanings assigned to them by users, emoji and reacji vary in emotional intensity, which then allows them to customize their selection of frequently used emoji and reacji for convenience. For Dexter, he replaced \swarrow 'angry face' with \backsim 'disappointed face' in his customizable "Your Reactions" panel to reflect his own personality.

This is also where we may see a certain semantic shift with respect to certain reacji. Because of the trends of personalization and customization, the default symbols of the reactions panel seem to be declining in their ability to express favorable sentiment. As mentioned to me by Elle, there is the notion of the "likezone," where a person's message is reacted to with 4 'thumbs up.' This is seen as less favorable and less welcoming as when, say, the heart reacji is used. Derrick and Elle do confirm that the heart is on a higher level of sentiment, but for M.Love and Dexter, even the default heart is beginning to lose its initial flavor. This is why they utilize other variants such as 9 'sparkling heart' and 1 'heart decoration,' respectively.

4.3 Discussion

Let us now return to my initial aim of differentiating the emoji and the reacji and summarize the findings to do so. In terms of adjacency pairs, the reacji is preferred as the SPP and is thus used for more pair types. It is also used more often than emoji to close conversations. This may be due to de-escalation of conversational activity: it seems that text, emoji, and reacji express direct engagement in a declining scale, in that order. As compared to the emoji, the reacji is not encoded as a turn in the chat, so it is of a lower level of "activity" and thus invites the close of a conversation more easily. As for turn-taking, the reacji is used to facilitate longer turns, also because of how it is attached to the message per se. It is thus preferred as the TRP and urges the current speaker to maintain their speakership. Lastly, emoji and reacji have similar functions in both preference and repair, though not without positional nuances.

The communicative needs fulfilled exclusively by the emoji are how it may demonstrate intensity through more than one insertion in succession (see Table 23). It is also crucial in the decoration of textual responses, especially as it can be placed prior to one's own text; though according to Elle position does not affect interpretation. The reacji, on the other hand, may be thought of as also embellishing text, but it always spatially follows the other party's textual message. This reveals that the visual factor must be considered in differentiating the emoji and reacji. The reacji also offers a deeper and more direct engagement with the messages of one's conversation partner precisely due to its more efficient design. This is because one's emotional reaction is attached to the message of the other interlocutor, which in a sense is their possession or their personal space in cyberspace. It becomes visually part of their message. As a result of this attaching feature, the reacji is then the perfect asynchronous translation of the two-way simultaneity of face-to-face communication. This means that the listener can afford to show his or her engagement or appreciation even during his or her conversation partner's turn, with much less "noise" and occupied space as compared to when emoji or text are used. Only, this simultaneity is visual (text and symbols on screen) rather than auditory and visual (nodding, grunting, etc.). It is thus comparable to the concept of backchanneling, i.e., how interlocutors respond whilst the other party is yet speaking, in face-to-face conversation (Yngve, 1970).

The further similarities found between the reacji and emoji—that they can express contradictory emotion, have a contagious nature, supplement text, and intensify in sentiment according to their numerous variations—prove that the reacji is still essentially an emoji. Yet, the data collected has hopefully shed light on the pronounced capacities of the former as distinguished from those of the latter.

5 Conclusions and Recommendations

This paper thus sought to explore those capacities using the four interactional organizations of CA. One of these, that of adjacency pair types, helped prove that the reacji can function as a response where the emoji does not (at least, according to the data I found). It is preferred over the emoji as the SPP due to its compactness and attaching quality, but this depends on the kind of FPP and kind of reacji—taken together, the kind of adjacency pair type that is used. Conversely, there are instances that show how the reacji fails to function as a real SPP due to the presence of the following text. Dolot and Opina (2021) were indeed correct in considering that the reacji may also just be an emoji functioning as a reaction.

Both emoji and reacji are only supplementary for emotional engagement in online conversation, and the text is still the bulk of content; but reacji fulfill this role of engagement more directly and efficiently, and are more versatile in doing so. This is due to the fourfold nature of the reacji: how it can be either TRP, SPP, both, or just mere reaction. It supplies more convenience and more direct simultaneous engagement, and is thus an effective tool in streamlining the pursuit of social solidarity in online communication.

As a result of my interpretation of the data, which yielded the reacji as not only capable of replacing a textual response but also a mere reaction, I would suggest a different way to transcribe reacji from how I had done it here. Because, while faithful to the chronological element of the interaction, my method depicted the reacji as encoded in the same space as an ordinary textual or emoji-only response. This then disregards its 'attaching' quality, an element proven to be indispensable when analyzing its unique functions, and makes it easy to identify as an SPP. Perhaps Meiler's (2021) method, where he included the

emoji at the end of the message and set it off with red brackets, would be more advisable for future studies.

Lastly, since this study was mainly composed of preliminary observations, a more nuanced analysis may be possible through a more rigorous application of DCA. Other CA concepts, such as the three-part exchange (an adjacency pair-like construction with three elements; see Tsui, 1989), can also be used to comment on how reacji commonly function as a third, closing component (see Table 15). Further insights may be drawn from other theories that have also been applied to CMC, such as Speech Act Theory (SAT), a theoretical opposite to CA that implies that meaning originates from within interlocutors rather than dictated by conversational context (Gibson et al., 2018). With this, reacji may be analyzed in terms of their function of conveying covert, intended messages (see Table 19), which may uncover yet another layer of emoji use in online talk.

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Street Naming and Odonymy in Quezon City

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Abstract

This paper describes the odonymy in the Philippines's Quezon City (QC). A list of 3,957 unique street names in QC is generated from the database of OpenStreetMap (OSM) and arranged into an index. From this list, the odonyms are categorized into four emerging main categories of street names: (a) Eponymic or Commemorative, (b) Cultural, (c) Themed or Associative, and (d) Descriptive. It is found that a third (1,285) of streets in QC were eponymic or commemorated a significant person or event in the country's history. Six hundred and forty-two (642) streets were related to some aspect of Philippine culture, heritage, religion, and values system. Street names that were themed or had semantic associations with one another were most in number at 1,674. And street names that described its location or a nearby landmark numbered at 356. These four, with their respective subcategories, also serve as a typology of odonyms and thus reflect a tradition of street naming practice in QC. The overlaps in the typology and categories of odonyms are due to the polysemy of some street names and reflect the simultaneous deployment of various naming motivations and strategies by the state and private stakeholders, including political, historical, cultural, religious, ecological, and ideological considerations.

Keywords: toponymy, odonymy, street names, Quezon City, OpenStreetMap, urban studies

1 Introduction

To the inhabitants of an area, its frequent visitors, passengers and plyers, and all other wayward wayfarers, street signs and street names are simultaneously ubiquitous and crucial. In the most practical sense, street names allow for efficient and successful land-marking and navigation. But behind each and every official name for a highway, street, avenue, road, drive, lane, bridge, alley, exit, boulevard, rotunda, place, and any other path is a deliberate choice and an enacted policy, reflecting perhaps the various cultural-ecological values and beliefs of its area and era, or maybe an appreciable historical figure or event, and even latent political agenda and ideology. The study of such geographical

names and naming practices is called *toponomastics*, and this paper is an exercise at *odonymy*, the sub-branch dealing with the names given to streets and street-like paths.

1.1 Paths and Destinations

In particular, this paper aims to describe and discuss the odonymy in Quezon City (QC) in the Philippines' National Capital Region (NCR). A list of all official street names street is henceforth meant to be inclusive of residential and suburban area streets, as well as minor and major national and public roads and highways—in and through QC is generated from the database of the open-source website OpenStreetMap (OSM). The collected list, which is essentially an index of streets in QC, is then categorized into any emerging themes or categories, creating a sort of typology for street naming. I also aim to provide some insights into how this typology and convention for street naming in QC may reflect the cultural and political ethos of both its policy-makers and citizens.

As such, the following questions serve as a guide throughout the research:

- 1. What languages are the official street names in QC in? Do the street names have or undergo any sort of orthographic variations? If so, what are these variations?
- 2. What are the emerging practices, themes, and conventions for street naming in QC? How can these inform the identification of a typology of street names?
- 3. Are there any naming motivations (e.g., political, historical, religious, cultural, ecological, ideological) behind the street naming practices based solely from the typology and data?

I will first give a brief introduction to the spatial and theoretical scope of present study, a short background on QC, and an explanation of the paper's other limitations and its potential significance. I will then move to a short review of extant literature on odonymy, and then to an explanation of my method and data gathering procedures. Next, I will provide an overview of the odonymy of Quezon City and an analysis of my data and typology with some insights and conclusions. Finally, the list of streets arranged by category is appended to the end of the paper.

1.2 Streets, Signs, and Street Names

In a toponomastic undertaking, we must first define and bound the space we are dealing with. In the most basic sense, a street is a public thoroughfare where people and vehicles can pass to get to places. Streets are usually flanked by houses and infrastructure, and should lead to other streets. A couple of these streets will form a block, and a collection of blocks creates a city. Hence, streets are commonly associated with urban sprawl, although any recognized and traversable thoroughfare anywhere already counts as a street. In fact, streets themselves are subjects in the field of urban studies and anthropology. Lynch (1960/2014), for example, classifies streets as a path, one of five elements of the "city image" along with edges, districts, nodes, and landmarks. To Lynch, paths are channels along which individuals can move and observe the city and other environmental items. One of these items are street signs, the physical name and label of the street.

We can read street names, or *odonyms*, from the physical street signs on which they are inscribed. Neethling (2016) provides a standard structure for street names everywhere, consisting of two main parts:

[Specific Name] + [Generic Type]

The specific name is the actual official name of the street that differentiates it from all others, like "Katipunan" or "E. Jacinto". The generic type, meanwhile, is the type of path the street is, like "Avenue" or "Boulevard". Of course, as the generic type can be taken as a form of modifier, the placement of these words relative to the specific name may vary per language. Street names in French, for example, have the generic type preceding the specific name (Ferguson, 1988). In some areas, street names are not salient geographical features, so the presence and use of the generic type matters even less, like in some areas in Japan (Neethling, 2016). Differentiating among the various generic types will prove to be essential to this paper later on, as these are key to furnishing a unique list of street names in any area. However, the various physical and definitive differences among these generic types will not be discussed here any further.

The naming of streets and the placement of physical signposts serve various functions. Most apparent of these is that they organize place and space, and by extension they are crucial in the (re)organization of daily life and its activities and events. Other practical functions include a referential function, as street names are also used as points of reference in communication and spatial organization. Street names also serve a navigational function, as they allow movers to traverse the city and get to their destinations in a systematic orderly manner. In this way, street names and their signs are markers of locations of activities, transactions, and movements. Street names also have an administrative function as they divide and bound the city to distinct areas or districts governed by concerned local government units. And finally, street names have latent functions that go beyond the practical. Street names and signs are also treated as having semiotic functions due to being part of the linguistic landscape. And in the case of streets being purposefully named by policy after a chosen entity or idea, they exhibit a commemorative and political purpose as well (Azaryahu, 1996; Casagranda, 2013).

In short, odonyms are both literal signposts and semiotic signs. On one hand, several odonomastic studies already treat street names as a significant text of the city, a "city-text" (Azaryahu, 1996; Oto-Peralías, 2017). Meanwhile, some studies merely treat street names like an index, a collection of words we can extract from its environment and arrange purposefully in a list, from which we can then gather inferred information about the city (Casagranda, 2013; Perono Cacciafoco & Tuang, 2018). This paper's treatment of odonyms in QC is more akin to the latter type of odonymy.

1.3 Quezon City as an Urban City

Quezon City (QC), the Philippines' most populous city, is itself a commemorative eponym, named after the country's second president, Manuel L. Quezon. Out of the 16 cities-municipalities of the National Capital Region (NCR), QC is the most populous, sitting at a population of around 2,900,000, and also the largest in terms of land area

covered at about 161.11 square kilometers (QCPDD, 2018). To put these numbers into perspective, both QC's population size (23%) and land area make up about a quarter of the whole of NCR, the other three quarters belonging to the fifteen other city-municipalities combined (QCPDD, 2018). With regard to the distribution of its population by religion and language spoken, the following tables are taken from QCPDD (2018) through the national census of 2015:

Table 1

QC's Population Distribution by Religious Affiliation

Religious Affiliation	Number	Percent
Roman Catholic	2,532,395	86.25
Protestant Christian	165,162	5.63
Iglesia ni Cristo	135,566	4.62
Islam	32,242	1.10
Others/None	70,751	2.40
Total	2,936,116	100.00

Table 2

QC's Population Distribution by Language Spoken

Language Spoken	Number	Percent
Tagalog	1,287,154	46.78
Bisaya/Binisaya	370,580	13.47
Bikol	248,588	9.03
Ilocano	223,692	8.13
Hiligaynon	119,473	4.34
Others	502,092	18.25
Total	2,751,579	100.00

The distribution of QC's population by religion and language spoken may inform our insights on QC's odonymy later on, particularly the language of street names and any religiously named streets. Furthermore, through a preliminary test using OSM, which I will explain in more detail at the methods section, I found that QC's streets number at around 5,000, while the median number of the other city-municipalities in NCR hover around 1,000 to 2,000, with Navotas and Pateros both being below 500.

The fact that QC towers over NCR in number and in scale should not be surprising. After all, its zoning and boundaries indicate that it was a "planned" city, and from 1948 to 1976 even served as the nation's capital (Pante, 2019). Pante (2019) also discusses in detail the history of QC as a political urban city, as well as the geopolitical changes it has undergone over the decades. QC can be illustrated by numerous social and private housing projects (hence the districts named Project 1, Project 2, etc.) and the stark juxtaposition of urban slums with gated subdivisions and high-rise, high-cost condominiums. Nevertheless, QC is still one of the country's most competitive economic

and entrepreneurial hubs, and it is also considered the base of important media networks and companies.

Contemporary QC is home to 142 barangays divided into six congressional districts. Its sheer number of government units show its capacity as a center of political activity and, in fact, a crucial base for elections and garnering policy support. Of course, there is also an informal way of cutting up QC into various culturally popular districts. These districts are also notable for the coherence of their street names which abide by a recognizable theme. For example, Maginhawa Street, also known as "eat street", in Diliman is but one of many streets in the vicinity named after the theme of what purports to be Filipino values and aspirations, along with Malingap, Maamo, Madasalin, and the like. Close by is what is called the "Scout area", a neighborhood in the district of Laging Handa (which is also the scouts' motto) whose streets are named after the surnames of 24 Filipino boy scouts and officials who perished in a plane crash on their way to the 1963 11th World Scout Jamboree in Greece. As a result, some previously alphanumerically named streets in the area (e.g., South 2, South A) were renamed to commemorate the fallen scouts (Ocampo, 2020). There are also some areas in QC, and perhaps cities in general, where the streets are named with reference to a proximate well-known landmark. Examples are the neighborhoods and streets around Katipunan Avenue, location of the Jesuit-run Ateneo de Manila University and other schools, which are named after Jesuit saints (e.g., Loyola Heights, Xavierville) and around the theme of Philippine education and Filipino educators (e.g., Varsity Hills, Esteban Abada, Nicanor Reyes) (Sison, 2017).

The naming and renaming of streets and other public spaces and infrastructure in the country are regulated by guidelines from the National Historical Commission of the Philippines (NHCP). Naming practices, including who may rename, what may be renamed, what kinds of names can be given, and when renamings can happen, are outlined in NHCP's Revised Guidelines of 2011. Concerned government departments and local government units are advised to comply with these guidelines. In accordance with NHCP, the QC Council also released their own Ordinance SP-2462, S-2015 on (re)namings of public places. From both documents, we can work out a sort of priority system wherein Filipino, local, or indigenous terms, toponyms, and odonyms are preferred over Hispanicized ones, which are preferred over borrowed (i.e., English) ones. There is also a strictness and hierarchy when it comes to commemorative street names after persons and politicians. For example, primary roads are reserved for past presidents and national heroes, secondary roads are for legislators, and tertiary roads are for local officials and prominent families who have made great contributions to the welfare and development of the Filipino people. Streets can only be renamed to commemorate particular people only at least 10 years after their death unless their life or death was exceptional (i.e., martyrdom and patriotism). Moreover, streets already named after persons cannot be renamed after persons lower down in the hierarchy. In NHCP's guidelines for historic centers and heritage zones, "streetscapes" are also considered to be of significance and up for conservation. It can be read from all these guidelines that the following tenets are strived for in (re)naming streets and places: historical significance, aesthetic unity (i.e., the thematic consistency), and continuity (i.e., cultural salience and logistical considerations). A recent case of an attempted street renaming happened back in 2020, as top officials tried to rename Del Monte Avenue in QC after action star Fernando Poe Jr., to which the NHCP initially objected, citing reasons of Del Monte's centuries old legacy and history (Cordero, 2020).

1.4 Roads Not Traveled By

The paper will only be dealing with "official" street names in QC from data available in OSM. Note that data and information in this website can be changed by any registered user; hence the first minor bump in the road: the paper aims to study official street names, yet OSM employs the contributions of "unofficial" individuals. Thus, data from OSM is pliable to human error. Nevertheless, only unique streets of QC in OSM's data as of March 30, 2023, the date I extracted my initial list, will be treated. As such, unofficial, informal, or other pop culture names for areas are excluded. The list of street names will also be treated from a synchronic perspective, so the etymologies, mythologies, historical developments, and name changes of particular streets are not discussed; newly added streets after the said extraction date are also not taken into account. Still, an exploration into the more widely used terms, names, and shortcuts that people use to refer to popular places and streets, as well as their developments over time, remains interesting and worthwhile for a separate study.

This paper does not use data from Google Maps or Waze because the data from these private companies are not publicly available for free. Data from official sources, like the local government of Quezon City or other concerned government agencies, are also left as an unexplored resource for this paper. I recognize that data from official sources may be more trustworthy and, in any case, would have at least served as a useful index for cross-checking. But the convenience and relative ease offered by OSM and its already available open-source code, which is meant for data sharing anyway, were ultimately preferred.

Because the area covered by the paper is the entirety of QC, it deals with a large amount of data and thousands of individual entries. Thus, the paper is more quantitative in nature, and the attempted odonymy here is more of a bird's eye, large-scale view rather than a particularized and heavily localized approach. In this vein, the produced list of streets is treated like an index, and the reading of the street names is then like reading from a phonebook. As the street name is extracted from a database, the street name is also removed from the physical space it labels, from the environmental context it belongs to, and from the linguistic landscape it is a sign of. Simply put, I am not physically there on the streets I am studying. The street name is taken as unrelated from the physical characteristics of the street it names, as well as its location amidst the other streets. In real life, this is obviously not the case, so this opens up an unexplored complementary field of inquiry with regard to the odonymy of QC. Overall, the paper treats street names as indexed on a list, not as distributed across space nor time nor as part of the cityscape of texts.

1.5 Turning Corners

The field of toponomastics and odonymy is vast, and I must constrain myself to these limitations in the interest of feasibility. Regardless, an odonymic study of this sort is useful at the very least because it provides a workable list and index of street names in QC as of March 2023. Furthermore, the study can serve as a baseline for more focused, localized, and in-depth toponymic studies in the Philippines in the future. It can serve as a point of reference or a standard for comparison, and in this regard, it fills a gap in the literature. Through my utilization of OSM's code and data, and with the completion and acceptance of a sensible paper, perhaps I can also contribute to the academic acceptance and validity of using collaborative open-source websites as reliable data resources. Not only do these sorts of sites promote intellectual freedom and the democratization of information, I believe that these also foster an environment of active participation of knowledge-seekers across geographies. Also, by making use of a ubiquitous city-text (i.e., odonyms) as quantifiable data, and thus potentially correlational data, I hope to make a preliminary empirical contribution to the social sciences, a discipline which can be helped instrumentally by quantification and digitization through the use of new technologies, as exemplified by Fabiszak et al. (2021) and Oto-Peralías (2017). Lastly, the study of street names is worthwhile because as ubiquitous as they may seem, odonyms themselves are an oft overlooked political arena wherein discourse and power are exhibited and exercised, which I will now discuss in the next section by covering some related studies.

2 Review of Related Literature

In this section, I will give an overview of existing literature on odonymy from both abroad and within the Philippines.

2.1 Odonymy as an Urban Subfield of Toponomastics

Odonymy, or the study of street names, belongs to the broad field of toponomastics. Neethling's (2016) concise summary of Toussaint's (2007) definition captures the scope of odonymy efficiently: "[odonymy] concerns itself with the names and naming of public streets, roads, and highways; how and why such names are selected; the approval, cataloging, and standardizing of these names; and making information about these names available" (p. 1). These concerns are shared by this paper.

Because streets names are more commonly associated with towns and cities, perhaps due to their organizational and administrative functions in governance, odonymy is also seen as a more urban subfield of toponomastics (Neethling, 2016). No doubt, the escalating gentrification and growth of urban sprawl all over the world in recent years contribute to the widespread association of the street with the city, again rooted in its function as an administrative unit. Asphalt, business establishments, cars, and standardized signposts are common images of an urban streetscape. These thoroughfares are also usually given an official name by their respective local government units. Yet uncemented, undeveloped, unnamed paths in rural places all qualify as streets too and, in fact, it can be argued that these are streets in their most basic and "primitive" form; that these are how the streets we walk begin. These streets, which are barely considered streets in the modern urbanized sense, are more akin to a general path, a common way, a culturally known passage to one's destination; these streets are places and spaces in their very essences. These places and spaces may have their "official" names mutually agreed upon and given to them by locals; at the same time, these very same paths have "unofficial" or "informal" names used by visitors, migrants, or even the very same locals but in different situations.

The names people use for streets and paths also expectedly change over time, as do names for other places, things, and even peoples, because those very users change too. So, we see here that names and the places they name run parallel to each other as they undergo changes over time: as the physical characteristics and inhabitants of a place change, so do its names. All this is to say that we can situate odonymy within toponomastics as one of the latter's more urban and modern reimaginings and reinterpretations of place and space naming. Hence, streets as we understand them today can be treated as place and space touched by modernity's urbanizing and bureaucratic forces (Cumbe, 2016; de Certeau, 1980/1984; Low, 1996).

2.2 Odonyms As Signs in Place, Space, and Time

My review of extant literature reveals that odonomastic papers can be situated across a sort of methodological and theoretical spectrum. On one end are papers that treat street names as part and parcel of the physical street sign, as componential to the linguistic landscape of which it is part, and as inseparable from the rural or urban environment within which it exists (see Amos, 2015; Banda & Jimaima, 2015). These studies view the street name and sign as a sign, and treat it from a structural, semiotic perspective. Street names are treated as part of discourse, as discursive units themselves, and as such carry within its name politics and ideology, almost akin to Roland Barthes's mythological signification. Studies like Ferguson (1988) and Moll (2011) treat them as part of the "symbolic infrastructure" of an area, for example, and thus as semiotic and politically-charged.

Among these studies is Amos's (2015) of street signs in Toulouse, France, which discusses how because of the ubiquity and uniformity of street signs, they have often been overlooked as part of the linguistic landscape and thus have not warranted further analysis. Yet they argue that it is precisely the mundane visibility of the street name in daily life that gives the language of the odonym visibility. And this visibility, in turn, can be used to unmask and even challenge linguistic hierarchies in the area, hence contributing to language vitality efforts and minority language activism.

Moreover, Banda and Jimaima (2015) discuss how the fadedness or general absence of street signs can unexpectedly retain their purpose as navigational "signposts." Through the intentional repurposing by the locals of rural Zambia, they show how the street name and sign is somehow debased to a semiotic form, subsequently finding for it a new meaningfulness in its fadedness (despite it being more "invisible" and easier to forget). This act also becomes a form of protest through the locals' show of persistence

in the face of poor material conditions. Odonomastic studies like these that treat the street name and sign as a politically-charged sign also constitute the subfield of critical toponomastics, which take the place and the place name as sites of discourse, laying out the colonial history and aspirational futures of said place across space.

Apart from the physical structure of the street sign, the odonym itself is also essential to its being a political sign. Naming and labeling, after all, can be seen as an exercise of power done by the namer on what it is naming. While in its most basic and practical sense, naming can be a mere cognitive discrimination among concepts and meanings, an imprint and trace of the name-giver and their motivations are nevertheless left on the identity of the named entity (Brink, 2016; Mabanglo, 2009). Casagranda (2013) even goes on to call it a "form of norming," priming one's expectations and ideations; as such, naming is a way of (re)defining. And in the case of place naming, the concept applies to acts of boundary-setting, territory-marking, identity-forming, and nation-building. Of course, these also apply to intentionally named streets, either by public policy or by the private choices of the street's stakeholders. Motivations like commemoration and marketing thus become part of the decision-making process of naming streets (Azaryahu, 1996). Furthermore, Augustins (2004) describes the act of street naming as a political act of "dedication" in accordance with an intellectual or moral tradition as a means to stratify and differentiate social and spatial reality.

On top of that, street names can also be renamed; it can even be argued that any act of naming in toponymy is always an act of renaming. As the odonym is considered to be relatively more pliable and subject to changes, should logistical and financial considerations allow, street names are a relatively more routinely changed element of the city-text. Azaryahu (1996) calls street renaming a simultaneous commemoration and de-commemoration, a "ritual of revolution". Accordingly, street renaming is often a signal of shifts in power, particularly among those with authority over urban planning decisions, may it be political upheaval, a change in bureaucratic regime, the establishment of a new political order, or the promotion of the values and ethos of new era, among others (Azaryahu, 1996; Casagranda, 2013; Light et al., 2002). As the new name receives elevated recognition and begins to enter public usage and memory, the replaced name meanwhile is lowered down into the history of the mundane, the realm of the forgotten. This exchange is why the subfield of historical toponomastics exists: political motivations and influences in place naming can be easily left behind by the name, especially ones with colonial roots (Yeoh, 1992).

Because renamings are a public political act, these can also be met with resistance and conflict, between those who argue for change and those who mean to conserve the status quo (Palonen, 2008). In fact, I found a substantial number of odonomastic studies dealing with street renaming and their political and ideological motivations, ramifications, and backlash. The papers of Azaryahu (1997), Light (2004), and Matsyuk (2014), for example, discuss street (re)naming policies in Central and Eastern European cities as influenced by the rise and fall of the Soviet republic and the remnants it left behind. Some others discuss the relevance of street naming policies on matters of local and national identity and in dealing with the baggage of historical conflict; Faraco and Murphy (1997) is an odonymy of Almonte, Spain, facing its riddled past of dictatorship. Azaryahu and Kook

(2003) and Wanjiru and Matsubara (2016) both look into street naming as factors and shapers of reputed identity amidst troubled pasts and presents, particularly as local cultural heritage for the former and as an act of national decolonization for the latter.

The frequent targeting of the odonym at times of political change only points to its ideological latency as an urban feature. Azaryahu (1996) tells us that however ubiquitous street names may be, they nonetheless end up serving as representations of legitimate history, one created by policy-makers and urban planners who "introduce an authorized version of history into ordinary settings of everyday life" (p. 312). To illustrate, as we walk through the city and navigate its streets, we can read through its history as laid out in a flattened grid of streets, with the past and even deeper past intertwined into a single present time and all their complexities and contradictions settled in a sort of anachronistic narrative; think of "Katipunan Avenue" intersecting with "[Ferdinand] Marcos Highway." In this vein, the ubiquity and mundanity of street names make them powerful urban propaganda markers, and iconographic symbols that silently (re)configure cultural space, public consciousness, and memory.

We see here that despite odonymy being seen as a more urban branch of toponomastics, it is still necessarily entangled with history. Taylor (2016) provides a useful guide to possible methods in place name research, yet theirs is more applicable to studies with a focus on the history and development of the place and its names. Lim and Perono Cacciafoco (2020) tackle toponyms of metro rail transit stations in Singapore from a historical-comparative approach, highlighting the languages of the toponyms, their significance, and their changes over time. Yeoh (1992), meanwhile, is a seminal work on historical odonomastics, outlining the colonial roots of Singapore's street name system and illustrating a contemporary image of its odonymy.

2.3 Odonyms As an Index of City-texts

On the other end of the spectrum are odonomastic studies that remove the street name from its physical environment and instead read it from a purposefully arranged list or index. By doing so, these studies can treat each individual odonym as a quantifiable and scalable data point. These studies do not reject the significant nature of the street name (i.e., as an ideological sign), and in fact these can be seen as the next progression to such semantic-semiotic treatment of street names. And because these studies methodologically deal with larger numbers of street names, their treatment of odonyms as quantified geographic data can be used correlatively and comparatively. This allows for observations on street name types to lead to wider conjectures about the motivations behind their naming and their possible consequences.

For example, Oto-Peralías (2017), following Azaryahu (1996), categorizes street names as part of a wider collection of "city-texts" along with the other linguistic signs that make up an urban area's linguistic landscape. However, their treatment of such citytext is that it can be quantified, and in the social sciences, they argue that it can be a useful metric that can indicate religio-cultural values, historical appreciations, and infer economic status. Using a deep statistical analysis making use of all the odonyms of Spain (around 700,000 in number), they were able to correlate the types of street names to various socio-political factors and issues. For example, they were able to connect the predominance of male commemorative street names over female names with persisting gender inequality and male dominance in Spanish society. They were also able to point the presence and prevalence of "nationalist" street names to certain implications related to Spanish national identity-formation and nationalism. Most interestingly perhaps, they were able to correlate street names to matters of memory, historical distortion, and electoral politics. In particular, they found a significant correlation between the presence in some areas of what they described as "Francoist streets" (i.e., streets named after or commemorating former Spain dictator Franco) and the vote share of right-wing parties in those areas at elections. Oto-Peralías's (2017) heavily quantitative study reveals that street names are not-so-ubiquitous after all and can be used as sociocultural indicators.

Interestingly, Fabiszak et al. (2021) also attempts to quantify the "ideological weight" carried by the semantics of the odonym, in particular of commemorative street names in two towns in Central and Eastern Europe. Working from the precept that street names often symbolize the political ideologies promoted by the state, they attempt to arrive at a systematic and statistical procedure that codes and quantifies these ideologies. Their paper recognizes the challenge of defining and bounding "ideology," and ultimately ends up delineating two ways ideology manifest: in the semiotics of the street name and in the nature of the street renaming process. Nevertheless, they show that ideology in some form is encoded in city-texts like odonyms.

In the making of this study, I also made use of some of what I consider to be model papers in odonomastics as inspiration and methodological basis. Azaryahu (1996) provides the theoretical foundation on street names and their semiotic and political operation. Casagranda (2013) then offers a useful theoretical layer that integrates perspectives from critical toponomastics, linguistic landscape approaches, and postcolonial studies as applied to odonyms. Next, Oto-Peralías (2017) exemplifies how street name data can be treated statistically to become useful socio-cultural indicators. And lastly, Hsiyan (2020), Oto-Peralías (2017), and Perono Cacciafoco and Tuang (2018) all provide examples of odonymies that classify the street names of selected places into a sort of typology according to their semantic content. In particular, this paper takes much inspiration from the typology and categories presented in Perono Cacciafoco and Tuang (2018), as they identified four (4) main categories of street names: (a) Commemorative, (b) Borrowed, (c) Thematic, and (d) Descriptive. The main categories I ultimately found for QC are discussed in the later sections.

2.4 Toponomastics in the Philippines

Finally, in the realm of toponomastics in the Philippines, I only found a few studies that could be considered odonomastic in subject or approach. Ango's (2009) paper discusses some instances of street renaming in Cebu. They show that while street names can be changed as a result of public policy, these may end up more confusing than efficient, even muddling the "identity" of an area; the acceptance and usefulness of such changes necessarily takes time, and the practical functions of street names as markers of space and navigation can easily trump any ideological purpose they may

carry. Meanwhile, Juanico (2018) is a presentation of the possible role of toponomastics in heritage preservation. And finally, Lesho and Sippola (2018) and Romero (2021) both discuss the toponyms of Manila and its surrounding areas. Taking into account the pertinence of an area's geographic characteristics in the naming practice, both agree that "native" or precolonial place names were commonly based on natural characteristics of the local environment (i.e., plants, landforms, and waterforms). However, the country's colonial history eventually manifests itself in the contemporary collage of its toponyms. The Spanish introduced the practice of giving settlements commemorative names (i.e., after hagionyms, religious events, places in Spain or elsewhere, important historical or political figures, or other given Spanish names). English influence, in contrast, is mostly seen in military zones and administrative units like forts and economic hubs (i.e., business centers and gated neighborhoods). This analysis is quite similar to the one done by Cavallaro et al. (2019) in their application of the Sequent Occupance Theory in the toponomastics of Singapore, that is, a region exhibits a pattern of cultural layers laid upon each other, where each layer can be attributed to a particular civilization or culture (i.e., colonizer) that once occupied it, like a kind of cultural sedimentation. Doubtless, sequent occupance is apparent for Manila and its cities as former seats of the country's colonial past.

The extant literature I reviewed here all draw on mixed methods approaches that make use of qualitative judgments and quantitative assessments. We see here that research on odonymy typically gravitates towards the realms of onomastics, critical toponomastics, and social geography and urban studies. Overall, odonomastics finds salience in the study of "social changes in commemoration politics as reflected in the city as text" (Fabiszak et al., 2021, p. 420), some taking on a more localized semiotic approach, while others a more wide-scale quantitative one. The application of such odonomastics on Quezon City, as a city with a colonial history and religio-economic character tempered by administrative policies, is all the more worthwhile. In the next section, I discuss the data gathering software, method, and procedures I utilized to arrive at and explore the odonymy of QC.

3 Methods

In this section, I give a brief background on OpenStreetMap (OSM) as a geographic information system (GIS) and explain the method and procedures I followed in order to: (a) generate an initial list of street names in Quezon City, (b) trim the list to only contain unique street names, and (c) categorize each unique entry of a street name to its respective category.

3.1 OpenStreetMap As a Collaborative Geographic Information System

OSM is an open-source collaborative geographic database emphasizing local knowledge. This means that anyone with internet access can add their own data into OSM, and take whatever data they need from OSM's database as well. This data includes maps, shape

files (the actual 2D mapping of city elements, including paths, buildings, open spaces), lists and locations of utilities and certain establishments (like bus stops, railways and bike lanes, public washrooms, etc.), and text files that label these shapes and locations, among many others. Any and all data are contributed and worked on collaboratively by users with access, who include mapping enthusiasts, GIS professionals, software engineers, market analysts, humanitarians and social workers, and many others in the geomapping community. These contributors, according to OSM's site, use aerial imagery, GPS devices, and low-tech field maps to verify accuracy. The site values local knowledge, which means that contributors and collaborators are encouraged to focus on their local areas to maximize locally available and up-to-date information.

In this regard, OSM is much like other open-source database websites like Wikipedia. This opens up the site and its data to the same benefits and pitfalls that other open-source collaborative sites have. One of them is simply human error, in the form of typological errors and irregularity with orthographic choices. For example, the first contribution I officially made on the site was to fix the spelling of the street of our permanent address in Cainta, Rizal (i.e., from "Hyundia" to "Hyundai"). The possibility of errors like this makes things a bit more difficult: it may make some search queries inaccurate and data sets incomplete. Still, this is only an issue with OSM's text data, like its collection of street names and other tags, and is workable overall.

Gammeltoft (2016) discusses the exciting potential uses of GIS and geospatial databases in onomastic and geographic research. However, I am yet to encounter similar odonomastic studies that make use of OSM as the primary resource and source of text data. In this regard, my undertaking may be considered unorthodox in its methods, or at least experimental in its approach. Regardless, OSM contains a lot of useful data, which can be extracted by researchers in various ways. For this paper, I needed to extract the names for streets and paths, which are treated as text data in OSM's database.

3.2 Routes and Procedures

First off, I did a preliminary feasibility test using OSM by generating a list of street names from each city in NCR through the use of a particular code. Text data like street names can be extracted from OSM's database with the use of Overpass Turbo, a third-party software that data mines OSM's interface through code. The code needed to extract street names was already available in Overpass API's search query guide (see §7.1). All I needed then was to test how the code works. I found that the way the code is designed works like this:

- 1. One narrows down the area/scope for extraction of street names by typing the place name in place of "AREA" in the line area[name="AREA"];.
- 2. The code relies on how places and areas are labeled in OSM. Unfortunately, if one or more geographically distinct places are named or labeled with the same name, the code will cover and extract from all places in the world with that name. For example, replacing "AREA" in the search query code with "Manila" will extract street names from all places named "Manila" all over the world (i.e., in NCR, in Spain, etc.). This limitation makes it particularly difficult to extract accurate data

from individual cities with borrowed and foreign names (e.g., Manila, San Juan). However, thankfully, places like "Metro Manila" and "Quezon City" are uniquely named areas so the extracted streets from those places are deemed to be strictly from the Philippines.

3. Once an area is chosen and typed into the code, one only needs to click "Run" on the top-left portion of the site. Overpass will then load the extracted data on the right side of the screen, arranged in alphabetical order and with duplicates (i.e., exact same strings) removed.

I managed to tabulate the data from NCR's 16 cities-municipalities as well as Cainta (the municipality in Rizal where I live) in a Google Sheets file (see §7.2). The median number of streets for each city in NCR hovers around the 1,500 range, with QC being the highest with 5,136 and Navotas being the lowest with only around 200 streets.

The extracted data sets seemed to be plausible and accurate, with the exception of Manila and San Juan which faced the problem I mentioned above. At this point, there were a few more issues with the data sets that still need to be cleaned up due to how the code is designed, which I have listed here:

- Paths (streets, sidewalks, trails, and other channels in which people travel) are all tagged as "highway" in OSM; these include major and minor roads, slip roads, and non-car roads like named footpaths and staircases, so these are also included in the data set.
- Foreign streets: some streets from abroad might still make its way to the data set because of the same area name existing in some other country.
- Duplicate streets: the code already removes exact string duplicates, which is useful because OSM sometimes has two labels for long major streets or streets intersected and cut by another wide street; what does not get filtered out are other types of streets with the same name (e.g., Katipunan and Katipunan Extension), and "synonyms" that actually refer to the same thoroughfare (e.g., Anonas Avenue and Anonas Road).
- Alphanumeric streets: numbered and lettered streets are tricky because of their ubiquitous cardinal naming (e.g., K-1, K-2, Alley 1, ... Alley 30).
- "Informally" named or variably spelled streets: some streets also stand out due to how they are named or orthographically spelled, which perhaps may be a result of the idiosyncratic orthographic choices of the contributor (e.g., some streets are enclosed in double quotes (""), some streets are in uppercase, some streets are just misspelled).
- There are also instances of streets, usually major ones, crossing or going across boundaries of two or more cities in NCR (e.g., EDSA). These streets are included in the data set of each city they pass through. This may also explain why in some data sets, streets that are "officially" part of one city are also included in other cities (e.g., some streets of Cavite are included in Muntinlupa's data set simply because they pass through Muntinlupa).

I then singled out the list of QC streets on a separate spreadsheet in its own column, henceforth called "unique list" (see §7.2). Next, I had to deal with the issues I listed above for the list of QC streets. First, I had to separate duplicate (i.e., same name,

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different type) streets from the unique list into separate columns based on their type (e.g., "Katipunan" remained in the unique list, yet "Katipunan Avenue", "Katipunan Extension", and "Katipunan Road" were separated into their respective columns of "Avenue", "Extension", and "Road"). I decided to keep the street name without a type, if ever it had duplicates, in the unique list because I deemed that the specific street name was what is important for the analysis and typology, rather than its generic type. The following types were separated from the unique list into their own respective columns if they had a type-less duplicate in the unique list: (a) street, (b) avenue, (c) road, (d) extension, (e) lane, (f) interior, (g) bridge, (h) alley/aisle, (i) exit/gate, (j) tunnel/underpass, (k) loop/circle/rotunda/bend, (l) service/access/bypass road, and (m) boulevard.

Second, by giving each street name a quick background check (Google search and OSM search) to confirm that they were indeed a street in QC and not some other place, I manually removed foreign streets from the unique list.

Third, since non-street places were also included in the list, I had to separate these from the unique list into their respective columns as well. These included: (a) footbridges/-footpaths/bike lanes, (b) compounds, and (c) actual places. Actual places included subdivisions, gated villages, areas, courts, colleges, malls, offices, business establishments, plazas, parks, and other public places. Curiously, these places were extracted by the code from OSM, and I surmise that this is because they are tagged as "paths" in the database simply because they did qualify as paths (channels of movement), just not as the streets I am looking for.

Then, once these duplicates and non-streets were separated from the unique list, I had to perform a spelling and orthography check on each remaining entry on the unique list. Meanwhile, I decided to retain in the unique list the following: alphanumeric streets, streets that had variability in spelling and orthography (but were not misspelled), and streets that belong and run along other cities besides QC (e.g., EDSA).

After cleaning up the unique list, it ended up having 3,957 unique entries of street names. The next step was to then categorize the remaining entries in the unique list into their respective category in the typology. I owe Perono Cacciafoco and Tuang (2018) and the four (4) main categories of odonyms they identified in my own identification of four emerging main categories: (a) Eponymic/Commemorative, (b) Cultural, (c) Thematic/Associative, and (d) Descriptive. I had then made a separate spreadsheet for each of the four major categories (which will be discussed further in the next section of the paper), and within each spreadsheet were columns for each subcategory also differentiated by the language of the street name (see §7.2). Sorting each individual entry of the 3,957 one-by-one was made tedious by the fact that a brief background check was also done for each odonym before they were categorized. This was to know and ensure the meaning and category of each street name. To illustrate, it was not apparently obvious for some names that they were names of local mountains in the country, or that some were actually English names for flowers, et cetera. Ensuring the meaning of each was crucial for a reliable tally and typology.

After each entry was categorized into their respective categories, quantity and quality checks were done to ensure accuracy. I had to make sure that the total number of entries for all the categories and subcategories added up to 3,957, and I also had to ensure that

there were no misplaced or missing entries. These are done through functions in the spreadsheet and through a comparison with a base copy of the unique list. Lastly, I tried to specialize and narrow down my categorization and typology of the odonyms as much as possible and as long as it remained practical and purposeful.

After each entry was categorized and accounted for, it was time to run down and crunch the numbers and percentages with the help of the features and functionalities of Google Sheets, the results of which will be discussed and analyzed in the next section.

4 Quezon City Odonymy and Data Analysis

In this section, I discuss the typology of street names in Quezon City after following the procedures discussed in the previous section. Ultimately, street names in Quezon City can be said to belong to four (4) main categories: (a) Eponymic or Commemorative, (b) Cultural, (c) Themed or Associative, and (d) Descriptive. Each of these categories have their own subcategories and further delineations. These categories can also be seen as "naming practices" used by those with authority over the urban spaces of streets, be it by the local government units or private stakeholders (Perono Cacciafoco & Tuang, 2018). In the end, however, the typology and categorization are not so clean and clear-cut, as the categories often overlap and thus can be homogeneous; this is a reflection of how various naming practices are often simultaneously employed in naming streets.

4.1 Tally of Total Streets, Duplicate Streets, Non-streets, Removed Entries, and Unique Streets

According to the particular configuration of code I entered on Overpass Turbo, there are 5,136 named streets total in OpenStreetMap's Quezon City. However, this number was whittled down to 3,957 uniquely named streets after the separation of non-streets and duplicates and the removal of some entries. The breakdown of the total generated list is shown in Table 3.

Duplicates include streets with the same SPECIFIC NAME but different GENERIC TYPE; only one entry was retained in the unique list for each set of duplicates. Non-streets like footbridges, compounds, actual places, and mall driveways were also separated from the main list.

4.2 Orthographic Variations and Language of Odonyms

The following orthographic variations were causes for entries to be removed, as long as they are proven to be incorrectly spelled by cross-checking in Google Maps and that their correctly spelled form was also in the list (extra, missing, or incorrect characters are enclosed in brackets):

• typological errors and spelling mistakes: Alma[g]i[c]a, Cathe[i]rine, Don Vi[n]cente, Dunh[u]ill, E[x]ekiel, Grec[]io, [L]guerra Drive, Luis[]to, Matt[]ew, Mel[e]guas, Polar[]s, Sagit[]arius, Saint Philip[p], Sap[]hire, Stan[d]ford, Sul[a]tan Kudarat, Tangui[t]e, Soccor[]o, Wal[l]nut, Zuzuar[]egui

Tally of Total Streets, Duplicate Streets, Non-streets, Removed Entries, and Unique Streets

Total number of streets in QC generated by Overpass code Total number of duplicates and non-streets separated			
Generic type	Street	470	
51	Avenue	63	
	Road	54	
	Drive	80	
	Extension	155	
	Lane	35	
	Interior	19	
	Bridge	4	
	Alley/Aisle	23	
	Exit/Gate	6	
	Tunnel/Underpass	5	
	Loop/Circle/Rotunda/Bend	24	
	Service/Access/Bypass/Slip Road	20	
	Boulevard	2	
Non-streets	Footbridge/Footpath/Bike Lane	39	
	Compound	48	
	Actual Place/Mall	66	
Removed	Removed typos, non-streets, and non-places	66	
Uniquely named streets in QC after cleaning and filtering 3,957			

- the use of "n" over the letter "ñ": Osme[n]a, Do[n]a Juliana, Santo Ni[n]o
- missing period (.) and spacing: A[] Bonifacio, E.[]G. Fernandez Street, J.[]P. Rizal
- unnecessary use of dash (-): Biak[-]na[-]Bato, Mapagkawang[-]gawa
- incorrect capitalization: Gumamela [s]treet; Ilang-[i]lang; Ipil-[i]pil
- unnecessary spacing: Dap[]dap (no space in between); Waling[]Waling (dash in between)

Also removed were places, segments, and junctures that are not specific enough to be relevant, like:

- brand chain stores: chery, dkny, Nobilitys
- other non-streets: basement parking, basement parking exit, Pay Parking, Pedestrian Crossing, Pedestrian Overpass
- street segments: EDSA-Quezon Avenue, NLEX Segment 8.2, Skyway Ramp

There were also some streets that had variations in spelling, but were kept in the unique list because it is the name of the actual street:

- "Bougainvilla Street," "Bougainvillea Street," and "Bouganvilla" are all distinct streets in different areas
- "Poinsetia" and "Poinsettia"
- "Blue Bird" and "Love Bird" as opposed to "Bluebird" and "Lovebird"

There were also some entries that were entirely capitalized and kept in the list (e.g., GURAMI DRIVE, TILAPIA DRIVE). These belong to the same area and were probably

contributed by the same user. Aside from these, the standard orthography and structure of the odonyms follow the two-part structure, with only the first letters of each word capitalized. However, the form in the generated list may not be the form in the actual street sign, which typically capitalizes the entire name for visibility and clarity.

Table 4

Tally	of	Street	Names	by	Their	Language

Language	Number
Spanish	114
Filipino	469
English and Other Foreign	1,485
Arabic	1
Nominal or Eponymic	1,560
Uncategorized	328
Total	3,957

Odonyms were also classified by language whenever possible, yet not all names were classifiable as some were eponyms, vague, or possibly coined. Researching the etymologies of each name was simply infeasible for this paper. Nevertheless, Table 4 is a tally of the street names according to language. It is apparent that aside from eponymic streets, English dominates the language of odonyms, despite and contrary to the goals of official guidelines.

4.3 Emerging Typology and Categorization

Four main categories emerged from the unique list of 3,957 entries, each with their own subcategories. This can be considered a typology of the streets in QC according to their semantic content. The tally and breakdown of this typology is shown in Table 5, with the main four highlighted.

The next portion of the paper goes through each category and its subcategories and explains the reasoning and justifications behind each. I explain what kinds of names are subsumed under each (sub)category.

4.3.1 Eponymic/Commemorative (1,285)

The first main category is composed of eponymic (i.e., named after a person) and/or commemorative names. Making up nearly a third (32.6%) of QC's street names, included here are odonyms after personalities, forenames and surnames, groups, and historical events.

Particular Titled Person/Specific Full Name (523) The street name is considered a full name if it takes one of these three forms:

• [FORENAME] + [SURNAME] e.g., Betty Go-Belmonte Street

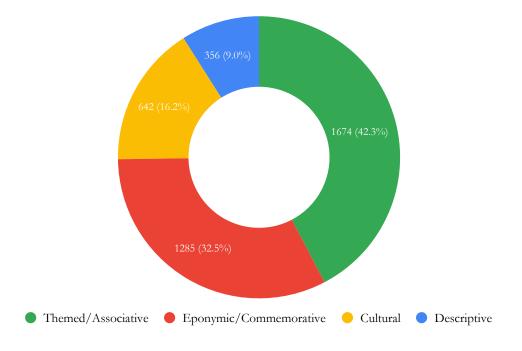
	Typology ar	d Tally Per	Category
--	-------------	-------------	----------

Uniquely Named Streets in Quezon City	3 <i>,</i> 957
Eponymic/Commemorative	1,285
Particular Titled Person/Specific Full Name	523
Single Forename or Surname	729
Group	26
Date	3
Event	4
Cultural	642
Values-based	180
Religious	266
Language-Literary-Heritage	161
Possibly Autochthonous Names	35
Themed/Associative	1,674
Fauna	107
Flora	237
Floral	77
Arboreal/Plant	94
Edible Fruit or Vegetable	66
Local Places	247
Foreign and Borrowed Names	835
Other Specific Themes	247
Temporal (Months, Seasons)	16
Occupational/Governance-Bureaucracy	93
STEM (Astronomy, Chemistry, Geology, Greek Letters)	100
Foreign Mythology	24
Colors	14
Descriptive	356
Geographical	16
Nearby Place or Infrastructure	42
Referential	57
Alphanumeric	241

- [INITIAL/s] + [SURNAME] e.g., C. P. Garcia Avenue
- [POSITION/TITLE] + [FORENAME OR SURNAME] Some examples of common titles in eponymic street names are General, King, Queen, Scout, etc.

e.g., Speaker Perez Street

Streets named after personalities, like the individual priests of GomBurZa, are included in this category because although they may be considered under the "Religious" subcategory, they are commemorated more due to their historical significance. Meanwhile, names of foreign saints are not included here as their commemoration is not because of national historical significance.



Pie Chart of the Percentages and Proportion of Each of the Four Main Categories

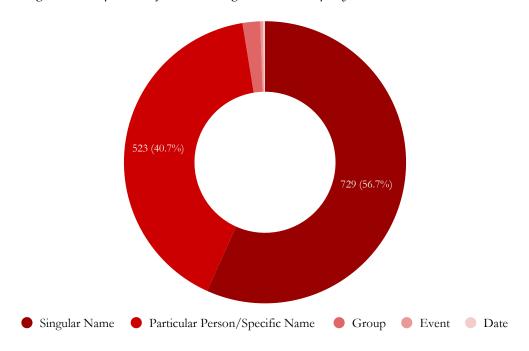
Singular Forename or Surname (729) Street names are placed in this category if they contain only one name, either a forename or a surname, even if the referent person is known by that singular name (like a mononym). Included here then are surnames of notably famous persons, locally and abroad. Also here are singular names preceded by the title "Don" and "Doña", as these titles are not enough to identify the particular person being referred to, unlike the other titles in the previous subcategory.

Groups (26) Included here are popular nicknames for three or more people (i.e., Gomburza), names for indigenous peoples, and war factions and squads.

Dates (3) There are only three streets in QC named after dates, and they are all in Spanish. 19 de Agosto is the birthday of QC's namesake, Cuatro de Julio is celebrated as Republic Day or Philippine-American Friendship Day, and Primero de Mayo is Labor Day.

Events (4) Three of the four events commemorated have to do with the 1898 Philippine Revolution, and one is a battle that happened during World War 2.

A source of ambiguity in categorizing names is due to some also belonging to the Thematic/Associative category, that is, some areas in QC have streets named after themes

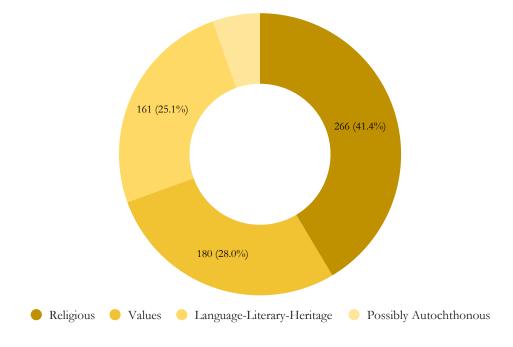


Percentages and Proportion of the Subcategories Under Eponymic/Commemorative

like "popular foreign artists" or "popular scientists." Ultimately, I considered the commemorative factor of eponymic streets over their being part of an overall theme. Eponymic streets normalize the popularity and historical significance of their namesake, and they celebrate the contributions and relevance of persons without elucidating (Azaryahu, 1996). Moreover, the inclusion of a title in the street name highlights that particular role of the person in life and history, perhaps even invisibilizing their other roles and characteristics; the absence of titles for some names makes their significance even easier to forget. Similarly, initializing some parts of a figure's name emphasizes the spelled-out name, and helps how that person is remembered by in public consciousness. Finally, this paper misses out on the opportunity to distinguish each name or personality by gender due to feasibility constraints. Doing so may reveal whether or not one gender dominates the cityscape text over the others or the presence of gender inequality in commemorative practices, as in Oto-Peralías (2017).

4.3.2 Cultural (642)

The second category is composed of what I deemed as street names that are cultural in nature. These include values-based or -laden names, religious allusions and figures, heritage and language-related names or those associated with the country's literary tradition, and possibly autochthonous names (i.e., indigenous names for the area).



Percentages and Proportion of the Subcategories Under Cultural

Values (180) Included here are abstract ideas, ideal traits, or perhaps underlying aspirations of the street-namers for its inhabitants. This subcategory is differentiated into three languages: Spanish, English, and Filipino. There are only five (5) Spanish entries (all belonging to one subdivision), while the English count (58) is doubled by Filipino names (117), which mostly take the word form affixed by *ma-* and *ka--an*. These entries range from personal characteristics (e.g., Kagandahan, Friendly) to community-based values (e.g., Mapagkawanggawa) to ethos of the national scale (e.g., Kaunlaran, Freedom). Although unfortunately outside the scope of this paper, it is also important to ask whose values these exactly belong to, and how they may be arranged ranging from conservative values to more progressive ones in line with contemporary value systems. Religious values are placed in this subcategory as well.

Religious (266) Expectedly, streets named after religious items, allusions, and hagionyms favor the city's (and country's) majority Christian population. Included here are names of people, places, and events in the Bible, names of contemporary Filipino religious practices and fiestas, hagionyms and names of disciples, and names and titles of God and Jesus Christ. There are religious street names in Spanish (100), in English (146, mostly hagionyms), in Filipino (18), and only two (2) are Islamic. An ambiguity encountered in categorizing is when a hagionym is now also an eponymic place name elsewhere in the country (e.g., San Fernando).

Language-Literary-Heritage (161) This is a broad subcategory encompassing language-related, literature-based, and Philippine heritage-associated street names. There are six (6) names that are in Spanish which fit here better than in any other category, as they are also Spanish phrases and remnants of Spanish occupation. Allusions to popular Philippine literature and genres (11) are here as well, including characters from folk epics and tales. Under heritage, sixteen (16) streets are named after Filipino parlor games, folk songs and dances, and festivals. One (1) street is named after the Arabic writing script Diwani. Yet a big chunk (127) of this subcategory are Filipino words which do not seem to be thematically related or patterned but are nevertheless aspects of Filipino culture. The overlap of categories is also apparent as some street names categorized here are also closely related to values and religious concepts.

Possibly Autochthonous (35) Included here are possible autochthonous toponyms reused as odonyms of the same area. I placed here street names whose meanings and etymologies are not so obvious and cannot be ascertained through only brief preliminary research. These names are under the Cultural category because, if ever they are indeed indigenous toponyms and terms, they would have enough historical rootedness to also be culturally salient; indigenous place naming is part of cultural heritage after all.

4.3.3 Themed/Associative (1,674)

The third main category is the largest of the four. These are street names named in accordance with a particular chosen theme, which are also neither commemorative nor culturally salient enough. This category also contains the most subcategories.

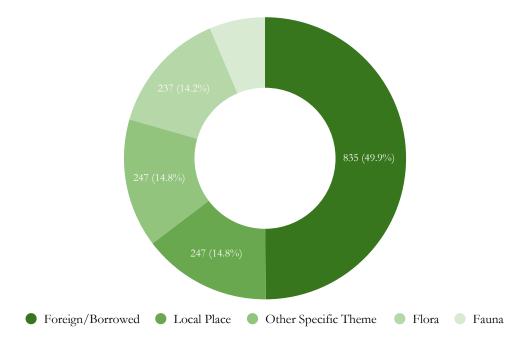
Fauna (107) Plenty of streets in QC are named after animals. There are 66 in English and 41 in Filipino. Fishes and birds seem to be the most represented animals in both languages.

Flora (237) The subcategory of streets named after plants and vegetation is further subdivided into three. Those placed in Floral (77) are non-fruit bearing flowering plants and trees; English names (59) outnumber Filipino flowers (18). Those in Arboreal/Plant are trees with large trunks that do not bear fruit; also here are names that have to do with wood and tree parts; Filipino trees (61) exceed English ones (33). Lastly, those in Edible Fruit or Vegetables (66) are apparent, these are the fruits, vegetables, and other harvests from plants and trees; Filipino names (48) also outshoot English ones (18).

Local Place (247) This subcategory includes streets named after contemporary local places. Language was not an important distinction here as these are eponyms and name transfer is common (Brink, 2016). Many entries are named after provinces, dams, mountains and volcanoes, islands, and popular tourist spots in the Philippines. This category is separated from Possibly Autochthonous because not all contemporary local place names are indigenous, some bear obvious influence from the country's colonizers.

144

Percentages and Proportion of the Subcategories Under Themed/Associative



The biggest ambiguity encountered here was that many contemporary local places are also eponymic to begin with (typically originating from Spanish occupation), some even named after saints or historical personalities, so a bit of overlap was unavoidable.

Borrowed/Foreign/Residential (835) On the other hand, a large chunk of thematic and associative odonyms are borrowed (usually from English) and foreign names transported to typically residential villages or gated subdivisions with themed street names. Many entries here are compound words formed by a color or adjective (e.g., Green, Bright), followed by a word for landforms or waterforms (despite having none in the proximate area; e.g., hill, river), then by an optional GENERIC TYPE (e.g., drive, lane). These streets with seemingly vague or coined origins are residential, and reflect what Brink (2016, p. 3) calls geographically transferred "vogue names." These typically spread as a sort of fashion and are meant to convey the named area's prestige rather than any truthful semantic message. Similarly, plenty of the streets in this category are named after foreign brands, like cigarettes and automobiles, and foreign cities, states, and provinces.

Specific Themes (247) Finally, subsumed under this category are other themed streets whose quantities are non-negligible and warrant a separate subcategory. These are:

- temporal names having to do with months and seasons (16)
- occupational names related to jobs, work, government office, and bureaucratic processes (93)

- names related to the STEM field, in particular, astronomy (celestial bodies), chemistry (elements and matter), geology (rocks and gemstones), and greek letters (e.g., alpha, gamma) (100)
- foreign, though mostly Greek, mythology (24)
- colors (14)

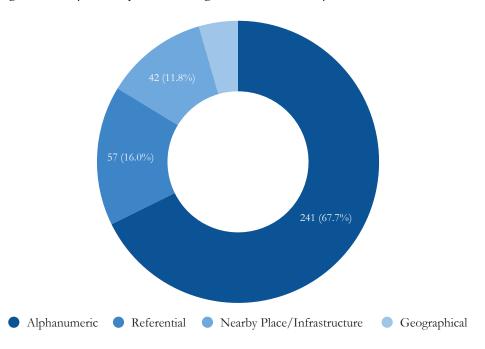
Perhaps it is unsurprising that themed odonyms populate private, middle class, residential streets. If the goal of private stakeholders and homeowners was to exhibit prestige and maintain a sense of unity or community among solitary gated housing, themed and associative toponyms certainly help in projecting an idea of "oneness" and interrelationship among its inhabitants.

4.3.4 Descriptive (356)

The last main category comprises odonyms that describe or are described by something in their immediate surroundings, be it a geographic landmark, a nearby place or infrastructure, or other streets. These are also the least in number.

Figure 5

Percentages and Proportion of the Subcategories Under Descriptive



Geographical (16) Perhaps the most descriptive, these odonyms are named after the notable geographic occurrences in or characteristics of their immediate vicinity. However, I must maintain that the reading of these street names is remote from the actual streets,

so all evidence used to ascertain that odonyms belong in this category are culled from its name alone; there may be inaccuracies but these are not due to the evidence. Mostly, this is the presence of the suffix *-an* in Filipino names (12) that signify a place where the suffixed stem occurs or is plenty (e.g., Santolan 'place of santol (fruit)', Manggahan 'place of mangoes'). A few entries are odonyms named after nearby creeks. And some appear to be describing the land of the area (e.g., Damong Maliit 'small grass') or the shape of the road (e.g., Elliptical Road).

Nearby Place or Infrastructure (42) These are streets named after a proximate prominent government office, private institution, building complex, barangay, district, village, or national highway. They typically take the form of [INSTITUTION ACRONYM] + [GENERIC TYPE].

Referential (57) These streets are referential because they are "defined" or identified in space with relation to other streets in the area. These are directional streets with reference to others of the same name and type. Street names containing any of the words "north," "south," "east," "west," "lower," "upper," "central," or their Filipino equivalents are placed here.

Alphanumeric (241) Similar to the previous subcategory, alphanumeric streets are identified in space relative to the other streets in their vicinity. These are typically ordered in a predictable sequence or series. Every numbered and/or lettered street is placed here.

Overall, there were various sources of ambiguity that were encountered in the process of categorizing. Most of these can be debased to the polysemous character of some names and odonyms. When it comes to eponymic odonyms where street names are named after places and are also named after some other thing or person, it essentially becomes a chicken-or-the-egg problem: which name came first? The issue is then reverted back to a historical one. Furthermore, commemorative eponymic street names can also be cultural, or they can belong to a theme and be associated with other names, or they can describe or pertain to something within the vicinity (like a statue or monument), and vice versa. There arises a possibility that one single street name can be argued to belong to all four main categories of my typology, or even none of them. These ambiguities and challenges only emphasize the fact that the typology and categories can be homogeneous, semipermeable, and overlapping just like the motivations behind naming practices. It must also be pointed out that the typology outlined here is the result of much mental strain inevitably infused with my own subjective value judgments.

5 Conclusions and Recommendations

This paper described and discussed the odonymy in the Philippines' Quezon City (QC). A list of 5,136 street names in and through QC was generated from the database of

OpenStreetMap (OSM) and arranged into a list or index. From this number, duplicate entries, non-streets, and other erratic entries were first separated from the list to produce a list of 3,957 unique odonyms. Then from this unique list, remaining entries were categorized into four main categories of street names that emerged: (a) Eponymic or Commemorative, (b) Cultural, (c) Themed or Associative, and (d) Descriptive. It was found that a third (1,285) of streets in QC were eponymic or commemorated a significant person or event in the country's history. Six hundred and forty-two (642) streets were related to some aspect of Philippine culture, heritage, religion, and values system. Street names that were themed or had semantic associations with one another were most in number at 1,674. And street names that described its location or a nearby landmark numbered at 356. These four, with their respective subcategories, also serve as a typology of odonyms and represent a tradition of street naming practice in QC (Perono Cacciafoco & Tuang, 2018). However, it must be noted that these types and categories have overlaps due to the interplay of polysemy with their usage as eponyms throughout history, reflecting as well the simultaneous deployment of various naming motivations and strategies.

Moreover, these odonyms were also classified according to their language. It was found that among the classifiable odonyms, English and borrowed words were most represented in the city-text at 1,485 unique streets. There were only 469 street names in Filipino, while a decent number were in Spanish at 114. Eponymic street names dominate the proportion of odonyms at 1,560. Furthermore, the odonyms generated from OSM had their fair share of orthographic variations in capitalization, spacing, use of punctuations, and initialisms.

From the typology and quantities of each category alone, we can say that odonyms may indeed evince some of the naming motivations behind them. The prevalence of eponymic odonyms reflects the politics of commemorative naming practices and conveys the state's official narrative and agents of history (Azaryahu, 1996). The presence and widespread use of local toponyms and culturally related names at the very least show an appreciation for the country's culture and heritage and may even be educational. The use of certain values and traits as odonyms appear to certify which ones are ideal for and expected from the model citizen and Filipino, and the dominance of Christian (in particular, Roman Catholic) odonyms matches the city's predominantly Christian population, perhaps even to the marginalization of other religions and denominations. The usage of animals and plants as odonyms also indicate an ecological and environmental consideration in the naming practice, as some streets may be named after species that existed in the region at least at some point in time. The preponderance of what Brink (2016) classifies as transferred vogue names, i.e., those that are foreign, coined, and typically borrowed from English, are meant to display prestige and associate a positive image to the area. Lastly, alphanumeric odonyms are the most practical, only functioning to organize the city's space; I hypothesize, however, that these streets are prime candidates for potential renamings in the future.

Furthermore, the preponderance of odonyms and borrowed vogue names in English may reflect several emerging characteristics of QC as an urban city (Pante, 2019). First, the appearance of odonyms named after nearby media and government institutions,

malls, and other consumerist hubs signifies the expansive commodification of its spaces that is taking place and the expanding role of the city as a center of sociopolitical activity in NCR. Second, the rise in number of the city's English-educated middle class coincided with, or indirectly caused, the outgrowth of suburban residential enclaves within the city. These zones project themselves as exclusive and prestigious spaces which utilize the upward social associations of English, through its toponyms and odonyms, in order to attract more potential homeowners and stakeholders. Lastly, Pante (2019) also notes QC's recent goal and strategy of developing and branding itself as a global city, which entails marketing itself as a metropolis capable of competing in the neoliberal urbanism happening in other global cities. The wide usage of the global lingua franca of English in its street names, despite a predominantly Filipino-speaking population and contrary to its own guidelines, reflects this attempt towards a globalist orientation.

Overall, it is unsurprising that public roads and national highways are named after those which the state deems significant and relevant to the country's history and project of nation-building (NHCP, 2011), while private and residential street names reflect prestige and project a sense of unity, community, and organization to attract potential residents and capital. From the mere presence of odonyms and the semantic and semiotic content they carry, we can thus read the cultural and political ethos of policymakers, urban planners, and citizens.

5.1 New Directions

TAN

The paper and its findings on QC's odonymy serve to support existing literature on toponomastics and odonymy elsewhere. It can be situated in between odonomastic studies that deal with the semiotic significance of street names and those that treat the odonym as a useful statistical indicator of other sociocultural factors. It also hopes to simultaneously situate QC within toponymy and urban studies around the world and populate the Philippines' own literature on toponymy.

There is still much to be explored and cultivated in this field. At the very least, this study can serve as a springboard for future work on toponomastics and odonymy in the Philippine setting. Future work can develop the literature in two directions. The first is widening the scope of such odonymy and typology-making to include other cities within and outside NCR. Other urban centers in the country and smaller still-urbanizing cities in provinces are both interesting fields. A larger mass of quantifiable data can also be more reliable and useful as statistical correlates or indicators, like in Oto-Peralías (2017). However, there is always a need to account for sample size and the particularities of a chosen geographic area. This paper only takes frequency, for example, and there is still potential in treating QC's nearly 4,000 unique odonyms in a more statistically useful manner. Furthermore, a comparison of the typology and its quantities with those of other cities is also intriguing; due to time and space constraints however, this study unfortunately misses on the opportunity to compare its odonymy with those of Oto-Peralías (2017) for Spain, Hsiyan (2020) for Amman, Jordan, and Perono Cacciafoco and Tuang (2018) for Singapore.

The second direction is a localization and closer look at odonyms and other toponyms of districts or barangays. A smaller scope allows for greater focus and precision with the data and information that can be gathered. There are plenty of ways this can be approached: perceptions and perspectives of inhabitants on their odonyms and street naming practices can be gathered, like in Hsiyan (2020); the historical development and stories of individual or clusters of odonyms can be uncovered from interviews or local knowledge; the changes and sedimentation of names for streets and its segments, whether formal or informal, can be studied; and the street sign itself and its presence and interaction with the rest of the linguistic landscape can also be explored.

Lastly, OSM's human element and limitations in its code ended up being factors. While OSM easily generated a list of odonyms, it did so indiscriminately and cleaning up the data it yielded amounted to considerable menial work. The use of official government data and lists as resources remains most preferable if at all they are available. But if not, this paper may have just paved the way towards an administratively useful odonymy and index of odonyms. Regardless, cities and their streets and spaces are still socio-historical constructs that are always "under construction" (Massey, 2005). Streets will always be grazed and rebuilt, destroyed and recreated, and endlessly renamed. The shifting subject of odonymy makes it so that the project itself must also be continuously constructed.

Acknowledgments

I dedicate this paper to the hundreds of nameless masked up faces that I encounter in my commutes, to the tambays, walkers, and flâneurs, the passengers and plyers, and all other wayward wayfarers who navigate the cityscape of GMM and read its texts every day. May we mobilize for and realize our right to mobility one day. To Professor Elsie Or for her guidance, to Dos for giving me the idea, Ania for walking with me, Wyan for his invaluable help, and my other loved ones, your names are inscribed, carved, engraved in every corner, nook, and cranny, in each invisible interstice of this work.

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7 Appendix

7.1 Overpass Turbo Code

Base Code Used in Overpass Turbo to Produce a List of Streets in an Area

```
[out:csv("name";false)];
1
   area[name="AREA"];
2
3
   way(area)[highway][name];
    for (t["name"])
4
5
    (
6
      make x name=_.val;
7
      out;
8
    );
```

Code Used in Overpass Turbo to Produce a List of Streets in Quezon City

```
[out:csv("name";false)];
1
2
   area[name="Quezon City"];
   way(area)[highway][name];
3
   for (t["name"])
4
5
   (
     make x name=_.val;
6
     out;
7
8
   );
```

7.2 Research Data

The data used in this paper, including (a) the list of all streets generated by Overpass Turbo; (b) the list of all duplicates, non-streets, and removed entries separated from the unique list; (c) the list of all unique street names in Quezon City; and (d) lists of street names in each category, can be found in the public Google Sheets link https://tinyurl.com/L199QCStreets.



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