

Discourse Sensitivity to *ay*-inversion by Canada-based Heritage Speakers of Tagalog

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Para sa pagmamahal ko sa wikang Tagalog.
(For my love of the Tagalog language.)

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Chapter 1: Introduction

1.1 Background

Languages differ in many ways, starting from their sound systems, grammatical structures, and the ways in which information is organized. One important area of variation concerns word order, or the arrangement of elements within a sentence. Word order is typically discussed in terms of the ordering of subjects, verbs, and objects. Dyer (2007) notes that the concept extends more generally to the ordering of linguistic elements at both the clause and phrase level. Word order provides an important window into how languages structure and communicate information (Dyer, 2007). For example, English relies heavily on a relatively fixed Subject-Verb-Object (SVO) word order (Biber et al., 2000). In contrast, Tagalog permits multiple grammatical word orders. This paper focuses on word order variation in Tagalog, a language in which the same event can be expressed through different sentence structures. However, the availability of having multiple word orders does not imply that these are freely interchangeable. Previous research has demonstrated that the distribution of Tagalog word orders is influenced by discourse and information-structural factors, meaning that certain constructions may be more appropriate than others depending on the context in which they are used (Nuhn, 2023). This makes Tagalog a useful case for examining how speakers manage grammatical variation shaped by both sentence structure, and the discourse context in which a sentence appears.

1.2 Research problem

The discourse-conditioned nature of Tagalog word order raises important questions about how such patterns are maintained in bilingual and heritage language contexts. Heritage speakers are individuals who acquire a language in the home while growing up in a society where another language is dominant (Polinsky & Scontras, 2020). Consequently, heritage speakers often experience varying levels of exposure to their heritage language across the lifespan. In the present study, Tagalog heritage speakers living in Canada navigate between Tagalog, where word order is closely tied to discourse and information structure, and English, a language that relies more heavily on a fixed SVO structure. Research on Tagalog-English bilingual communities in Canada suggests that English frequently becomes the dominant language of communication, even in families that actively seek to maintain the heritage language (Salvador, Nicoladis, & Diego, 2017). Differences in language exposure and use may therefore influence how heritage speakers maintain and apply grammatical patterns from Tagalog. More generally, studies of heritage language development have demonstrated that patterns of language use, exposure, and family language practices play an important role in shaping heritage language outcomes (Makarova, Terekhova, & Mousavi 2019; Moro & Russo, 2025). Makarova et al. (2019) found that children's heritage language fluency was related to both exposure and parental language attitudes in a Canadian immigrant context. These attitudes include parents' willingness to use the heritage language at home and create sustained opportunities for language exposure. Similarly, Moro and Russo (2025) show that Filipino heritage language maintenance in diaspora families is shaped by multilingual family practices, intergenerational transmission, and language choice at home. These findings imply how differences in language experience may influence how heritage speakers maintain and use overall grammatical patterns of a language.

Simultaneously, evidence from a previous study with a Tagalog-English bilingual suggests that English exposure may influence how Tagalog word order is used. Ronquillo (2015) documented that a Tagalog-English bilingual child produced Tagalog sentences in ways that differed from adult Tagalog patterns and appeared closer to English word order. However,

because this study was limited to a single participant, it remains unclear whether similar patterns are found among adult heritage speakers or whether these speakers maintain sensitivity to the discourse conditions governing Tagalog word order.

Despite growing research on Tagalog grammar, bilingualism, and heritage language maintenance, relatively little work has examined how adult heritage Tagalog speakers evaluate and produce discourse-conditioned word order variation. The present study addresses this gap by examining how heritage and non-heritage Tagalog speakers judge and produce predicate-initial, actor and patient *ay*-inverted constructions in various discourse contexts. In *ay*-inversion, a constituent appears before the rest of the clause and is separated from it by the particle *ay*, functioning as an inversion marker.

1.3 Significance of the study

This study advances a broader understanding of how discourse-sensitive grammatical knowledge is maintained across different speaker populations. Much of the existing Tagalog bilingualism research has examined word order preferences, child acquisition, possible English influence, phonological variation, and heritage language maintenance (Bondoc & Schafer, 2023, Garcia et al., 2018; Ronquillo, 2015; Salvador et al., 2017; Umbal & Nagy, 2021), but less attention has been given to how adult heritage speakers maintain sensitivity to discourse-conditioned patterns of language use. By examining how Tagalog speakers evaluate and produce word order across different discourse contexts, the study provides insight into the relationship between grammatical knowledge, language experience, and language use.

The project also adds to the evolving body of research on Tagalog by providing new data from speakers residing in both the Philippines and Canada. In addition to comparing speaker groups, the study examines whether factors such as language use, exposure and age of arrival are associated with the patterns of judgement and production in the findings. These findings may help clarify how discourse-related aspects of grammar are either maintained or reorganized in bilingual contexts.

Finally, this study contributes methodologically because it combines a felicity judgment task with a production task. The judgement task provides insight into speakers' evaluation of contextual naturalness of a sentence, while the production task shows which structures they produce spontaneously. Non-target behaviour may appear in spontaneous production as a result of retrieval or performance difficulties. Judgement tasks may provide more direct insight to speakers' mental representations of discourse-conditioned word order. Therefore, these tasks provide a more comprehensive explanation of how and whether English influences the discourse-conditioned word order variation of Tagalog heritage speakers than either method by itself could sufficiently provide on its own.

1.4 Study overview

To address these questions, this research paper studies how Tagalog speakers evaluate and produce predicate-initial VOS, actor *ay*-inverted, and patient *ay*-inverted constructions (leading to surface SVO orders) across broad focus, narrow focus, and topic contexts. Participants include native speakers residing in the Philippines and Canada-based Tagalog speakers with different language backgrounds and ages of arrival in Canada. The data was collected through a felicity judgment task, language background questionnaire, and a production task. This design makes it possible to compare what speakers judge as natural with the structure they produce themselves, while also considering how their language experiences may shape those patterns.

1.5 Chapter organization

This research paper is organized into seven chapters. Following this introduction, Chapter 2 reviews relevant literature on Tagalog grammar, word order variation, *ay*-inversion, heritage language development and bilingualism. Chapter 3 presents the research questions and hypotheses. Chapter 4 aims to describe the overall methodology of the research, including participants, experimental tasks, procedures, and data coding methods. Chapter 5 presents the results of the felicity judgement task, production task, and language background questionnaire. Chapter 6 discusses the findings in relation to discourse sensitivity, task effects, language experience, and implications for Tagalog grammar. Finally, Chapter 7 concludes the study by summarizing the main findings, discussing the contributions to research, and outlining possible directions for future work.

Chapter 2: Literature review

2.1 Tagalog clause structure and voice system

2.1.1 Predicate-initial clause structure

The preceding chapter introduced word order as one way in which languages differ in the organization of sentence structure. This section now turns specifically to the basic clause structure of Tagalog. This language is commonly described to be canonically predicate-initial. Schachter and Reid (2018) explain that in the most common clause type, phrases that express predicates precede words or phrases that express arguments (p.856). The authors distinguish between verbal and non-verbal predicate types in Tagalog. Since the present study examines transitive event descriptions, the relevant clause type is the verbal predicate construction. The theoretical analysis of Tagalog case alignment and grammatical relations remains debated and different approaches use different terminology for the arguments marked by *ang* and *ng*. Because resolving this debate is beyond the scope of the present study, the discussion below adopts a relatively neutral terminology where possible. The glosses throughout this paper, *ang* and *ng* are glossed directly as ANG and NG. In these clauses, the verb is followed by one or more arguments, as illustrated in example (1).

- (1)
- | | | | | |
|-------------|----|--------|-----|---------|
| Kumain | ng | saging | ang | lalaki. |
| eat.PERF.AV | NG | banana | ANG | man |
- “The man ate a banana.”

(Segalowitz & Galang, 1978)

In this example, the verbal predicate *kumain* “ate” occurs before the noun phrases *ng saging* “banana” and *ang lalaki* “man”. This predicate-initial pattern of Tagalog contrasts with English, where the canonical order is Subject-Verb-Object as shown in (2) and the subject therefore precedes the predicate.

- (2) The child ate a banana.

The comparison between (1) and (2) shows that Tagalog differs in the basic placement of the predicate relative to its arguments. However, the interpretation of Tagalog arguments is not

determined by word order alone. The grammatical roles of the arguments are signalled through markers and verbal morphology, which are discussed in the following sections.

2.1.2 Case markers: *ang* and *ng*

Unlike English, where grammatical relations are mostly identified by constituent order, Tagalog relies primarily on a system of case marking and verbal morphology to reflect the relationship between predicates and their arguments. Because arguments may occur in different linear positions within the clause, speakers cannot fully rely on word order to determine which participant is acting and the one affected by the event. Information about grammatical structure is instead encoded through case markers that appear before noun phrases.

The most frequently discussed case markers in Tagalog are *ang* and *ng*. These markers appear before noun phrases and indicate their grammatical roles within the clause (Schachter & Reid, 2018). Schachter and Otnes (1972) describe Tagalog markers as words that indicate the grammatical function of the nominal expressions they introduce. Paul, Cortes, and Milambiling (2015) emphasize that *ang* and *ng* are best analyzed as case markers. The present study focuses primarily on *ang* and *ng* because they are directly relevant to the distinction between actor and patient arguments in transitive clauses. The role of case marking can be seen in examples (3a) and (3b).

(3a)

Kumain ng saging ang lalaki.
eat.PERF.AV NG banana ANG man
“The man ate a banana.”
(Ronquillo, 2015)

(3b)

Kumain ang lalaki ng saging.
eat.PERF.AV ANG man NG banana
“The man ate a banana.”
(Ronquillo, 2015)

In both examples, *ang* marks the actor *lalaki* “man” and *ng* marks the patient *saging* “banana”. Even though the noun phrases appear in different positions, the interpretation remains unchanged. The actor continues to be interpreted as the doer of the action, while the patient remains to be the one affected by the event: “The man ate a banana”. This illustrates Schachter and Reid’s (2018) observation where constituent order alone does not determine grammatical relations in Tagalog.

One of the unique properties of Tagalog is that one core argument is selected as the *ang*-marked argument in a finite clause. Traditional descriptions often refer to this as the topic, subject or focus of the clause (Schachter & Reid, 2018). However, because the status of subjecthood in Tagalog remains a topic of theoretical debate, more recent work often uses the term *pivot* instead to refer to the syntactically prominent *ang*-marked argument (Bondoc & Schafer, 2023). The debate surrounding subjecthood in Tagalog is closely related to whether the *ang*-marked argument should be treated as a discourse topic. This distinction is important because the *ang*-marked pivot is not necessarily the same as the discourse topic. This can be

shown in a context where the patient is introduced as the topic, but the actor remains the *ang*-marked pivot in the answer, as in (4).

(4) **Context:** Eh yung saging, sino ang kumain?

“What about the banana, who ate it?”

Kumain ng saging ang lalaki.

eat.PERF.AV NG banana ANG man

“The man ate a banana.”

(Ronquillo, 2015)

In this example, *saging* “banana” is the discourse topic introduced by the preceding question. However, it appears as the *ng*-marked patient in the answer. The *ang*-marked argument is *lalaki* “man”, which functions as the grammatical pivot. This example shows that discourse topicality and *ang*-marked pivot status must be treated distinctly. Kroeger (1991) similarly argues that the *ang*-marked argument, which he refers to as the nominative argument “does not have the properties of a ‘topic’”, suggesting that grammatical and discourse prominence should be treated as separate notions (p. iv, details are presented in *Section 2.3.2*). The distinction between *ang*-marking and discourse topicality is important to the present study because then discourse topic can be manipulated independently of the constituent’s grammatical pivot status. Regardless of the terminology adopted, the *ang*-marked argument occupies a syntactically privileged position within the clause and serves as the pivot in many contemporary analyses. In contrast, *ng* commonly marks the non-pivot argument.

The status of *ang* and *ng* markers has also been the subject of theoretical discussion. Because *ang*-marked noun phrases are often associated with definite or familiar interpretations, and *ng*-marked noun phrases with novel or indefinite interpretations, earlier analyses frequently treated these markers as functionally similar to a determiner (Paul, Cortes, & Milambiling, 2015). However, Paul et al., (2015) argue that neither *ang* nor *ng* directly encode definiteness. Although the markers show some syntactic properties associated with determiners, their interpretations are not determined by definiteness alone. On this basis, Paul et al. (2015) analyze *ang* and *ng* as Case markers in K° rather than as determiners in D°. Under this analysis, *ang* should not simply be understood as an equivalent to the English article *the*, nor should *ng* be interpreted equally to the article *a*. Instead, both function as grammatical markers whose interpretations within the clause emerge from their syntactic and discourse environments. Finally, understanding the function of these case markers is essential for understanding how Tagalog clauses are structured. However, case marking alone does not determine which participant receives this privileged pivot status. This relationship is established through Tagalog’s voice system, discussed in the following section.

2.1.3 Voice system: actor and patient

Another defining feature of Tagalog grammar is its voice system, in which verbal morphology identifies which participant receives *ang* marking (Schachter & Otones, 1972; Kroeger, 1991). As introduced in *Section 2.1.2*, the *ang*-marked argument is treated here as the pivot of the clause (Bondoc & Schafer, 2023). The voice system helps direct attention to a particular participant in the event by determining which argument functions as the pivot.

Among the various voice categories available in Tagalog, this research study focuses on actor voice (AV) and patient voice (PV). These voice distinctions are expressed morphologically through verbal affixes. Actor voice can be marked by several affixes in Tagalog, but the examples in this study primarily involve the *-um-* infix. For example, the root *kain* “eat” appears as *kumain* “ate” in actor voice. In patient voice, the verb commonly holds PV morphology with the infix *-in-*. The same verbal root *kain* appears as *kinain* “ate” where the patient functions as the pivot of the clause (Bondoc & Schafer, 2023). Therefore, voice morphology provides speakers with information about which thematic role is associated with the *ang*-marked argument. In actor voice constructions, the actor argument is selected as the *ang*-marked pivot. This pattern is illustrated in (5).

(5) Actor Voice

Kumain	ang	lalaki	ng	saging.
eat.PERF.AV	ANG	man	NG	banana

“The man ate a banana.”

In this example, the actor argument *ang lalaki* “man” receives *ang* marking and functions as the pivot of the clause. The patient argument *ng saging* “banana” receives *ng* marking and functions as the non-pivot argument. In the patient voice construction, the patient becomes the *ang*-marked pivot, while the actor is marked by *ng*. This pattern is shown in (6).

(6) Patient Voice

Kinain	ng	lalaki	ang	saging.
eat.PERF.PV	NG	man	ANG	banana

“The man ate a banana.”

In sentence (6), the patient *ang saging* “banana” is selected as the pivot and receives *ang* marking, while *lalaki* “man” is with *ng*. In both examples, the voice morphology of the verb indicates the thematic role associated with the *ang*-marked argument, allowing different participants to be selected as the pivot of the clause. Furthermore, these also illustrate how the same event may be expressed through different voice constructions. The thematic roles stay consistent, but the pivot changes. This distinction is particularly important for the present study because both actor and patient-fronted *ay*-inversion constructions are included in the experimental materials. Since both actors and patients can be selected as pivots through the voice system, both can appear as the fronted *ang*-marked constituent in *ay*-inverted constructions. Therefore, understanding how voice interacts with pivot selection is essential for understanding the word order patterns examined in the present study. The interaction of voice and pivot selection provides the foundation for the word order patterns discussed in the following section.

2.2 Predicate-initial word order and variation

2.2.1 Predicate-initial structures: VOS and VSO

As discussed in the previous section, the actor and patient roles are not determined by constituent ordering alone, but by the interaction of verbal morphology and case marking. Among transitive predicate-initial clauses, both VOS and VSO orders are available in actor and patient voice. However, this examples in this section illustrate these two word orders using actor

voice clauses. The VOS pattern contains the verb followed by the patient (non-pivot), whereas the *ang*-marked actor (pivot) appears clause-finally, as shown in (7a). In the VSO pattern, the *ang*-marked (pivot) immediately follows the verb, and the patient (non-pivot) appears last, as shown in (7b).

(7a) VOS

Bumili	ng	libro	ang	babae.
buy.PERF.AV	NG	book	ANG	woman

“The woman bought a book.”

(7b) VSO

Bumili	ang	babae	ng	libro.
buy.PERF.AV	ANG	woman	NG	book

“The woman bought a book.”

In both clauses, *ang babae* “woman” functions as the actor and pivot, while *ng libro* “book” acts as the patient and non-pivot. The difference between the two sentences is in the linear ordering of the post-verbal arguments, rather than the assignment of grammatical roles. This illustrates why Tagalog word order variation must be understood in relation to voice morphology and case marking (Schachter & Reid, 2018).

The availability of both VOS and VSO has played an important role in discussions of Tagalog syntax. Kroeger (1991) argues that grammatical relations in Tagalog cannot be reduced to fixed structural positions. He continues to add that grammatical relations must be distinguished from surface phrase structure. Similarly, Bondoc and Schafer (2023) describe Tagalog as a language that exhibits considerable word order flexibility despite maintaining clear grammatical relations through voice morphology and case marking. Ronquillo (2015) likewise notes that Tagalog permits several surface word orders of VOS, VSO, and SVO. Among the predicate-initial orders, VOS has been frequently described as a canonical transitive word order, even though VSO remains grammatically available.

For the purposes of the present discussion, VOS was selected as the predicate-initial comparison structure in the felicity judgment. Even though VSO was identified to be grammatically available, the study does not investigate the variation that exists between VSO and VOS directly. The discussion of VSO is only included here to show that predicate-initial clauses can contain more than one possible ordering of post-verbal arguments. The following section examines previous findings on agent-first and pivot-related preferences, which are relevant for understanding why speakers may not treat all available word orders equally from each other.

2.2.2 Agent-first and pivot-related preferences

Although Tagalog permits multiple surface word orders, researchers such as Segalowitz and Galang (1978), Garcia et al. (2018), and Bondoc and Schafer (2023) suggest that speakers do

not treat all available orders equally. Rather than being entirely free, word order variation appears to be shaped by competing tendencies that influence how arguments are arranged within a clause. Researchers have proposed several explanations to account for recurring preferences observed in both production and comprehension.

One early observation concerns the preference for agents to occur earlier in a sentence. Segalowitz and Galang (1978) found that Tagalog-speaking children showed a tendency to interpret the first noun phrase as the agent and the second noun phrase as the patient, even when voice morphology and case marking on the sentence signalled a different role. The authors argue that this “agent-then-patient” strategy helped explain why children performed better on patient-focus VOS sentences than on actor-focus VOS sentences (p.60). They further note that Tagalog does not appear to provide strong linguistic pressures favouring this strategy, the preference may have origins outside the linguistic domain (Segalowitz & Galang, 1978).

Similarly, Garcia et. al (2018) provide additional experimental evidence that Tagalog word order preferences are sensitive to the interaction of grammatical and thematic roles. In a sentence-completion task, adult speakers showed a strong preference for agent-initial constructions in patient voice, but with variable preferences in agent voice. The authors directly argue that this asymmetry portrays the interaction of two ordering tendencies originally proposed by Kroeger (1993): an agent-first principle and a subject-last principle. Under the patient voice, both principles favour the same order because the agent is a non-pivot argument, while the pivot occurs later in the clause. In the actor voice, the two principles compete because the actor is also the pivot, resulting in a greater variability between available word orders.

Bondoc and Schafer (2023) build on these observations by reformulating these Tagalog word order preferences as interactions of two gradient constraints: an agent-first tendency, in which agents preferentially occupy the first post-verbal argument position, and a pivot-second tendency, where the pivot preferentially occupies the second post-verbal argument position. Their proposal treats these preferences as probabilistic tendencies as opposed to categorical rules. This account helps explain why agent-initial patient voice constructions are strongly preferred, and actor voice permits greater variability in the ordering of post-verbal arguments. For the present study, their distinction provides a way of explaining why some grammatical word orders are preferred over others.

These findings are important because they emphasize that Tagalog word order variation is not solely determined by discourse context. Structural preferences related to agenthood and pivot status may also influence speakers’ judgments and productions. Therefore, when evaluating responses across discourse conditions, it is important to consider whether preferences reflect discourse sensitivity, grammatical ordering tendencies, or an interaction of both.

2.3 *Ay-inversion*

2.3.1 *Structure of ay-inversion*

In addition to VOS and VSO, Tagalog permits a construction known as *ay-inversion*. This construction involves a constituent appearing before the remainder of the clause and being separated from it by the particle *ay*, often referred to as the inversion marker (Nuhn, 2023). For the purposes of the remainder of this paper, *ay-INV* will be used as the abbreviated form of *ay-inversion*, and the two terms will be used interchangeably. Examples (8a) and (8b) illustrate actor and patient *ay-INV* respectively.

(8a) Actor *ay-inversion*

Ang	lalaki	ay	kumain	ng	saging.
ANG	man	INV	eat.PERF.AV	NG	banana

“The man ate a banana.”

(8b) Patient *ay*-inversion

Ang	saging	ay	kinain	ng	lalaki.
ANG	banana	INV	eat.PERF.PV	NG	man

“The banana was eaten by the man.”

Ay-INV has traditionally been described as the type of inversion construction where a constituent that does not normally occur in sentence-initial position in a canonical clause is shifted to the beginning of the sentence (Schachter & Otnes, 1972). Schachter & Otnes (1972) note that *ay*-inversion permits a wide range of constituent types to be fronted, including arguments, adverbials and verbal complements. This exemplifies how the construction is not restricted to a single grammatical role or constituent type. For the purposes of the present research, the relevant cases are *ay*-inverted clauses where an actor or patient argument appears before *ay*.

According to these authors, a sentence containing *ay*-INV does not differ in denotative meaning from its non-inverted form. The primary difference is the stylistic register, in which Schachter & Otnes (1972) observe that *ay*-inversion is associated with relatively more formal styles of speech and writing that typically appears less in ordinary conversations.

However, more recent work has expanded the analysis of the inversion beyond its association with stylistic considerations. Nuhn (2023) notes that the construction has frequently been associated with marking a fronted constituent as topical, even though focused fronted constituents are also attested. This approach draws attention to discourse status of the fronted constituent in addition to the structural and stylistic properties of the construction.

2.3.2 Topicality, focus, and information structure

A central topic of debate in analyses of *ay*-inversion concerns the information-structural status of the constituent preceding *ay*. Information structure concerns how an utterance is organized in relation to the discourse context, including what is presupposed, what is asserted, and what entity the sentence is about (Nuhn, 2023: 60-63). As discussed in *Section 2.3.1*, *ay*-inversion has been commonly associated with topicality, but the fronted constituent is not restricted to topic interpretations. Nuhn (2023) notes that focused information readings are also attested, which suggests that *ay*-INV should not be treated as limited to a single discourse function. Nevertheless, topicality remains one of the most frequently discussed uses of this construction. Examples (9a) and (9b) illustrates these topic and focus interpretations presented by Nuhn.

Nuhn (2023) defines a topic as the entity with respect to which the speaker intends to increase the addressee’s knowledge. The comment is the predication evaluated relative to that topic (p. 60-61). In (9a), *Si May* identifies the entity under discussion and the following clause requests information about her. By contrast, (9b) the focus-sensitive particle *kahit* “even” associates with the fronted actor *si Pedro*, giving it a contrastive focus interpretation.

(9a) Topic interpretation

Si	May	ay	kailan	babalik	dito
----	-----	----	--------	---------	------

Si	May	INV	when	return.IPFV.AV	here
----	-----	-----	------	----------------	------

“As for May, when will she come back here?”
(Nuhn, 2023)

(9b) Focus interpretation

Kahit	si	Pedro	ay	hindi	mabubuhat	ito
even	SI	Pedro	INV	NEG	lift.IPFV.PV	this

“Even Pedro couldn’t lift this.”
(Nuhn, 2023)

However, the association between *ay*-INV and topicality does not necessarily mean that every fronted *ang*-marked argument functions as a discourse topic. Kroeger (1991) argues that grammatical and pragmatic prominence must be distinguished in Tagalog. In his discussion of discourse topicality, he concludes that *ang*-marked arguments do not consistently display a high degree of salience or continuity normally associated with discourse topics (p.77). This distinction is important as the fronted constituent in both actor and patient *ay*-inverted constructions is the *ang*-marked pivot. Its grammatical status remains constant, but the preceding discourse establishes whether the actor or patient is established as the discourse topic. This makes it possible to examine topicality independently from *ang*-marked pivot status.

Nuhn (2023) develops this issue further by examining how *ay*-INV interacts with information structure, voice morphology, and the role of the fronted argument. His discussion involves cases where *ay*-fronted constituents receive focus-related interpretations through focus-sensitive particles. These focus-sensitive particles provide evidence that *ay*-INV cannot be reduced to topic-marking alone. In the absence of the particles, the inverted constituent may still be compatible with a topic interpretation, however, the status of the fronted constituent must be determined from the discourse context.

Nuhn (2023) discusses an earlier hypothesis developed from Kroeger’s (1991) analysis and further elaborated on by Latrouite and Riestter (2018), according to which information-structural interpretation of *ay*-inversion depends on the relation between the fronted argument and the verb’s voice morphology. Within this hypothesis, actor-fronted *ay*-inversion with actor voice, and undergoer-fronted *ay*-inversion with undergoer voice mark the fronted expression as topic. Actor-fronted *ay*-inversion with undergoer voice conveys narrow focus on the actor. In his notation, these patterns are referred to as ACT *ay* AV, UG *ay* UV, and ACT *ay* UV, where ACT refers to the actor, UG to the undergoer (patient), AV to actor voice, and UV to undergoer (patient) voice.

The two patterns most relevant to the present study are actor-fronted *ay*-INV with AV and undergoer-fronted *ay*-INV with UV, illustrated in (9) and (10). Earlier analyses associated these patterns with topic-marking. However, Nuhn’s discussion indicates that the mapping between *ay*-INV, voice morphology, and information structure is not one-to-one: the structural form of ACT *ay* AV independently does not identify the fronted argument as a discourse topic; its interpretation depends on the surrounding discourse context.

(10) ACT *ay* AV

Ang	lalaki	ay	kumain	ng	saging.
ANG	man	INV	eat.PERF.AV	NG	banana

“The man ate a banana.”

(Nuhn, 2023)

(11) UG *ay* UV

Ang	saging	ay	kinain	ng	lalaki.
ANG	banana	INV	eat.PERF.PV	NG	man

“The banana was eaten by the man.”

(Nuhn, 2023)

The availability of both actor and patient-fronted *ay*-INV is important for the present study because it makes it possible to separate discourse sensitivity from a general preference for structures in which the actor appears before the patient. Therefore, actor and patient-fronted *ay*-inversion are included to examine how the fronted argument, voice morphology of the verb, and discourse context together shape speakers’ judgements of Tagalog word order.

2.4 *Discourse conditions in Tagalog*

The preceding sections established that Tagalog word order is shaped by various factors. The present section discusses the discourse conditions manipulated in the study: broad focus, narrow focus, and topic contexts. These conditions are of importance because the acceptability of predicate-initial and *ay*-inverted structures cannot be evaluated in terms of grammaticality alone. The naturalness of a specific word order depends on what kind of information is readily available in the discourse and what other information the sentence contributes. These same discourse conditions are also relevant to the production task, where participants’ spontaneous responses may reveal whether they choose different word order patterns depending on the discourse context.

2.4.1 *Broad focus*

Broad focus refers to contexts where more than one constituent is included in the focus domain. Sentence focus is a one type of broad focus in which the entire proposition is presented as new information. Nuhn (2023) explains that in sentence focus contexts, a general question like “What’s new?” does not establish a specific presupposition. Instead, the whole response is treated as new information and the focus domain contains the entire sentence (p.63).

The broad focus prompts in the present study are intended to approximate this kind of sentence focus. For example, *Anong nangyari sa kusina?* “What happened in the kitchen?” asks about a whole event rather than about a previously established actor or patient. This condition is relevant because Nuhn (2023) argues that canonical Tagalog word order can code for sentence focus. Therefore, predicate-initial responses are expected to be natural in broad focus contexts, where the whole proposition is presented as new information.

2.4.2 *Narrow focus*

A narrowly focused constituent is the constituent that constitutes new information of a sentence. Narrow focus may either fall on the actor or the patient. For instance, in the actor narrow focus condition, the patient is established by the prompt, and the actor supplies the missing information. In the patient narrow focus condition, the actor is established by the prompt, and the patient supplies the missing information this time. Following Lambrecht’s definition, Nuhn (2023) describes the focus as part of the assertion that differs from the presupposition, or more simply as the information supplied in response to what is questioned. In

his example of completive narrow argument focus, the question “What did John buy?” presupposes that John bought something. The answer of “He bought an Audi” supplies the missing object: *an Audi*, as the focused argument.

The author’s discussion of Tagalog wh-question responses shows that narrow argument focus can be expressed through a range of structures. In a guided spontaneous production task called the Tomato Story task, speakers first narrated a short picture story and were then asked follow-up wh-questions about the story. Some of these questions asked for one missing argument like who performed an action. These question-answer pairs create narrow focus contexts because part of the proposition is already presupposed, and the response supplies the focused argument. Nuhn (2023) reports that speakers used three main response strategies: *ang*-inversion, reversed *ang*-inversion, and canonical with in-situ focus.

These structures differ in where the focused argument appears. Example (10) illustrates the response in a regular *ang*-inversion, where the focused constituent appears clause-initially as a response to the question “Which child brought home tomatoes?”.

(12) Regular *ang*-inversion

Ang	bunso	niya	ang	nakapagdala	ng	kamatis.
ANG	youngest.child	3.SG.GEN	ANG	able.bring.PERF.AV	NG	tomato

“Her youngest child was the one who brought (home) tomato(es).”
(Nuhn, 2023:261)

The reversed *ang*-inversion has the backgrounded material appearing first and the focused argument appears later in the clause, usually indicated after *ay* or after a pause. For instance, another consultant gives a response, as indicated in (11).

(13) Reversed *ang*-inversion

Ang	nagdala	ng	kamatis	sa	nanay	niya	ay	ang	bunsong	kapati
										d.
ANG	bring.PERF.	NG	tomato	DAT	mother	3.SG.	INV	ANG	youngest.	sibling
	AV					GEN.			LK	

“The one who brought his mother tomatoes was the youngest sibling.”
(Nuhn, 2023:260)

Finally, the canonical word order with in-situ focus is where the focused argument remains inside the predicate-initial clause, rather than being fronted. A response to the question “Who was asked by his mother to go and buy tomatoes first?” is reflected in (12). These patterns demonstrate that narrow focus in Tagalog may be expressed through more than one grammatical strategy. None of the examples discussed here involve *ay*-inv; they include *ang*-inversion and canonical predicate-initial order. Therefore, speakers may use different structures to present the focused information.

(14) Canonical word order with in-situ focus

Inutusan	niya	ang	panganay	na	anak	upang	bumili	ng	kamatis
order.PERF.PV	3SG.GEN	ANG	eldest	LK	child	COMP	buy.AV	NG	tomato

“She sent her eldest child to buy tomatoes”
(Nuhn 2023: 261)

2.4.3 Topic conditions

Topic conditions are understood here in relation to the topic-comment distinction discussed by Nuhn (2023). Following Lambrecht and Gundel, Nuhn defines the topic as the entity that the speaker intends to increase the addressee's knowledge about, request information about, or direct attention toward. A topic is the referent that the discourse presents as the entity under discussion, while focus is the part of the utterance that supplies the missing or asserted information. Therefore, the same constituent can function as either topic or focus depending on the preceding discourse context. Topic status may also be assigned to either the actor or the patient. In the actor topic condition, the actor is established as the entity under discussion, whereas the patient supplies the focused information. In the patient topic condition, the patient is the established entity by the discourse prompt, and the actor supplies the focused information.

Nuhn's (2023) discussion of focus helps clarify this distinction. He defines focus as the part of the assertion that differs from the presupposition, or simply as the information supplied in response to what is being questioned (p.61-62). Topic conditions are especially relevant to Tagalog as *ay*-INV has been associated with topicality and information structure, as discussed in Section 2.3.2. The author summarizes several diagnostics that support a topic analysis of *ay*-inv. These include observations that *wh*-questions and focal answers to *wh*-questions generally cannot be *ay*-fronted, multiple *ay*-fronted constituents may occur in a single clause, and *ay*-fronted constituents typically precede syntactically marked narrow focus, and *ay*-fronted arguments may be co-referenced with resumptive pronouns (p. 124). These diagnostics support the view that *ay*-inversion is strongly associated with topicality, while also showing that *ay*-fronted constituents are not exclusively limited to topic interpretations. Topic conditions are therefore relevant in understanding *ay*-inversion because if it is associated with topicality, then the discourse status of the fronted constituent helps explain why an *ay*-inverted sentence may sound natural in some contexts but less natural in others.

2.5 Heritage grammar

The present study examines Tagalog speakers who differ in their age of acquisition of Tagalog, age of onset of bilingualism, age of arrival in Canada, and current patterns of Tagalog and English use. These speakers are not a uniform group because their linguistic experiences are shaped by multiple interacting factors including language dominance, proficiency, the amount and type of input they receive, and the contexts in which each language is used (Birdsong, 2014; Polinsky & Scontras, 2020; Montrul et al., 2014). Early exposure to a heritage language is only one part of a speaker's developmental history. Continued opportunities to hear and use may also contribute to its maintenance and variation in speakers' linguistic outcomes.

While the preceding sections established the discourse-conditioned nature of Tagalog word order, the next topic focuses on how knowledge of these properties develops, is maintained, and varies across different bilingual and heritage language trajectories. The following subsections discuss heritage speakers and variable input, discourse-conditioned properties in heritage grammars, age of onset of bilingualism, age of arrival and maturational effects, and family language practices. These factors help characterize participants' developmental and current language experiences and may help explain variation in their grammatical judgements and productions.

2.5.1 Heritage speakers and variable input

Polinsky and Scontras (2020) narrowly define heritage speakers as bilingual speakers who acquire a minority or home language in childhood while growing up in a society where another language is dominant. They describe a heritage language as a language that is spoken at home or otherwise available to young children but is not the dominant language of the larger society. Based on this definition, a heritage speaker (HS) is someone who has naturalistically acquired the knowledge of the heritage language from an early age. However, a HSs grammatical knowledge may differ from that of monolingual or homeland speakers because their experience with the language develops under different social and input conditions.

A key characteristic of heritage language acquisition is that the heritage language (HL) is often acquired and maintained under conditions of reduced or variable input. In both simultaneous and sequential heritage bilingualism, the dominant language of the broader speech community usually becomes the speaker's stronger language over time, although individual outcomes may vary. This imbalance is partly related to the conditions where the HL is heard and used (Polinsky & Scontras, 2020). It needs to be considered that HS may receive input from a relatively smaller group of speakers, such as family members or caregivers, and this input may be less homogenous than the input available in the homeland context (Polinsky & Scontras, 2020). It should follow that heritage grammars should not be understood as incomplete because differences in heritage and homeland speakers can instead reflect the quantity and quality of input, the demands of using a less dominant language, and the influence of the dominant societal language. These factors contribute to several possible outcomes in heritage grammars such as transfer from the dominant language, attrition, and divergent attainment (Polinsky & Scontras, 2020; Scontras et al., 2015).

A possible source of qualitative variation in heritage language outcomes is change in the language of the speakers who provide the HL input. Bayram et al. (2019) propose that attrition in first-generation immigrants and language change within immigrant communities may have a trickling-down effect on HL development. Since HSs commonly receive much of their input from immigrant family and community members, the available linguistic patterns to them may already differ from those available in the homeland. The authors argue that the input-providing generation may already diverge from homeland speakers in specific grammatical domains after prolonged contact with the dominant societal language (Bayram et al., 2019:450). There is a possibility that HSs can develop their grammars based on input that has already been affected by language contact or attrition.

The main implication is that variation among bilingual Tagalog speakers should be interpreted as difference in the input, dominance, exposure, and patterns of use. Scontras et al. (2015) present several bilingual speaker profiles showing that heritage speakers do not all experience bilingualism through the same path. Their profiles reflect differences in childhood language experiences, migration histories, community contexts, and shifts in language dominance. This reinforces the view that heritage speakers are shaped by multiple developmental trajectories. The next section considers how this variability may be relevant for discourse-conditioned properties.

2.5.2 Heritage grammars and discourse-conditioned properties

The preceding section discussed heritage grammar in relation to broad aspects of variable input, language dominance, and bilingual experience. These factors play a role when the

grammatical property under study is conditioned by discourse context, as in the case of Tagalog word order variation. Discourse-conditioned properties require speakers to both know that a structure is grammatically available and recognize when that structure is pragmatically appropriate. For word order, speakers must map grammatical form onto information-structural distinctions including topic, focus, givenness, and prior discourse context (Ionin et al., 2023; Laleko, 2022).

This type of mapping is often discussed at the syntax-discourse interface. Research in this area has proposed that bilingual speakers may show variability when interpreting structures that require grammatical information to be coordinated with discourse context. Kaltsa, Tsimpli, and Rothman (2015) examined the possible role of age of onset of bilingualism by comparing two groups of adult Greek-Swedish bilinguals. These groups consisted of heritage speakers who had been exposed to Swedish from preschool age and L1 attriters who began learning Swedish after immigrating to Sweden as young adults. The study focused on the interpretation of null and overt subject pronouns in Greek. Null pronouns are generally associated with continuity of an established topic, whereas overt pronouns are a discourse-marked option linked to topic shift. Participants completed a self-paced listening experiment with a sentence-picture matching decision at the end of each sentence. The pictures represented the preceding subject, object, or another referent as possible antecedents (Kaltsa et al., 2015).

For overt pronouns, both HS and L1 attriters were less consistent than their respective age-matched monolingual control group in restricting reference to the object antecedent. Although the object remained the preferred antecedent across all groups, the bilingual groups accepted subject antecedents more frequently, resulting in greater optionality in their interpretation of the overt pronoun. For null pronouns, the HS and attriters did not display a systematic difference in their antecedent preferences that would support an effect of early vs late bilingualism. The differences between the two bilingual groups for null pronoun experiment appeared in response times, with the younger HS responding faster than the older attriters in relevant comparisons. The authors conclude from their results that age of onset and differential input do not provide sufficient explanations for the groups' pronoun resolution patterns because the early and late bilingual groups showed a similar pattern of divergence from monolingual preferences in their interpretation of the discourse-marked overt pronoun (Kaltsa et al., 2015). Their findings show that differences in discourse-conditioned interpretation cannot be automatically attributed to age of onset by itself.

While Kaltsa et al. (2015) examine if age of onset explains discourse-conditioned interpretation, Laleko and Polinsky (2016) underline how bilingual outcomes may also depend on the specific discourse distinction being tested. They examined topic and subject particles among heritage and L2 speakers of Japanese and Korean. Topic marking was treated as a phenomenon mediated at the syntax-information structure interface from nominative subject marking, which they treated as more closely tied to narrow syntax. The bilingual groups generally experienced difficulty with topic marking than with nominative subject marking. However, the findings did not support a generalized account where all interface phenomena are uniformly vulnerable. In anaphoric topics, speakers are required to connect an expression to a referent established in the preceding discourse (p. 409). These were difficult, especially in conditions that involved topic particle omission, but in comparison to some bilingual groups, they showed better success with generic topics, which places fewer demands on discourse tracking. Although this study does not examine word order directly, it demonstrates how heritage

and L2 speakers may depend on how much prior discourse tracking an information-structural distinction requires.

Laleko's (2022) recent work on discourse-conditioned word order in heritage and L2 grammars provide a closer comparison to the present study. The study investigates how English-dominant heritage and L2 speakers of Russian judge canonical and non-canonical word orders in contexts that differ by information structure and verb type. Participants rated SV(O) and (O)VS structures in broad focus and narrow subject focus contexts with unaccusative, unergative, and transitive predicates. Much like Tagalog, Russian permits word order variation with the acceptability of non-canonical orders depending on discourse context they occur in (Laleko, 2022).

The author's results presented a mixed pattern. Across the experiment, the bilingual groups tended to rate canonical SV(O) more highly and were less accepting of (O)VS orders than baseline group. However, higher proficiency HS showed sensitivity in the transitive conditions; they rated OVS significantly higher in narrow subject focus contexts than in broad focus contexts. This sensitivity was not found in lower proficiency heritage HS, the baseline speakers and continued to prefer SVO over OVS in the narrow subject focus condition. In the intransitive conditions, none of the bilingual groups showed the baseline group's focus contrast, though higher proficiency HS were sensitive to the distinction between unaccusative and unergative verbs (Laleko, 2022:758-762). The author argues that HS do not experience a generalized inability to mark information structure through word order. Their performance depends on proficiency, sentence type, and sufficiently visible discourse cues in the sentence context.

Ionin et al. (2023) also provide another close comparison on the relationship between word order and information structure in heritage and L2 Russian. Their study examined whether English-dominant heritage speakers and L2ers understood the relationship between word order and narrow focus in transitive sentences. The task tested prosodically neutral SVO and OVS sentences in two discourse contexts, namely, object focus and subject focus questions. In baseline Russian, SVO is expected to be more appropriate when the object is in narrow focus. and OVS is more appropriate when the subject is in focus because the neutral pitch accent falls on the sentence-final focused constituent in neutral prosody (Ionin et al., 2023: 347).

The results indicated a clear difference between HS and L2 learners. HS patterned closely with baseline speakers as they rated SVO more highly in the object focus contexts and OVS more highly in subject focus contexts. In contrast, L2 learners showed a preferred SVO across both discourse contexts and did not show the same discourse-conditioned preference for OVS in subject focus contexts in comparison to the other groups. Ionin et al. (2023) argue that heritage speaker advantage cannot only be explained by proficiency considering increased proficiency was linked with more target-like acceptance with OVS in subject focus contexts among HS but not with L2 learners. They propose that the heritage speaker advantage may be related to contribution of early age of acquisition but acknowledges that heritage and L2 learners differ in age of exposure, input quantity and quality, and literacy experience. These findings show that knowledge of discourse-conditioned word order is not necessarily unstable in heritage grammars. Heritage speakers may retain sensitivity to this relationship despite the reduced input in the HL. (Ionin et al, 2023).

Leal, Rothman, and Slabakova (2014) add an important nuance to previous claims that syntax-discourse interface properties are vulnerable in bilingual and heritage grammar, according to the Interface Hypothesis. Their study examined Spanish Clitic Right Dislocation (CLRD), a structure in which a dislocated constituent must be linked to a discourse antecedent and

accompanied by an agreeing doubling clitic (p. 414). Leal et al. (2014) explain that successful knowledge of CLRD requires speakers to both determine whether the sentence is well-formed and if it is appropriate in the preceding discourse context. In the study's untimed felicity judgment task, Spanish HS at advanced and intermediate proficiency levels were compared with Spanish-dominant L1 speakers across contextualized CLRD conditions. All three groups distinguished the felicitous sentence containing the required clitic from the infelicitous cliticless version. Although individual performance showed some variability, specifically within the intermediate heritage group, the authors report no overall heritage speaker disadvantage relative to the L1-dominant speakers in the offline task. Therefore, they conclude that their findings do not support a strong prediction that heritage speakers necessarily experience difficulty with a syntax-discourse structure, even though CLRD is described to be highly infrequent in the input. This provides a cautious view of discourse-conditioned grammar such that heritage speakers may show variability in some domains, but the knowledge of discourse-conditioned structures is not necessarily incomplete in heritage grammars.

Across all these studies, heritage speakers' knowledge of discourse-conditioned grammar is neither uniformly preserved nor vulnerable. Kaltsa et al. (2015) found similar divergence in overt pronoun interpretation among heritage bilinguals and adult-onset attriters, indicating that age of onset alone was insufficient to explain their performances. Laleko and Polinsky (2016) showed outcomes that differed according to the type of topic and the amount of prior discourse tracking required. Laleko (2022) found that sensitivity to discourse-conditioned word order varied with proficiency and sentence type. Ionin et al. (2023) established that heritage speakers could retain a baseline relationship between word order and narrow focus. Leal et al. (2014) further demonstrated that HS may show a knowledge of infrequent discourse-conditioned construction comparable to an L1-dominant group in an offline task. These findings support a cautious account where performance depends on the specific grammatical structure, discourse relation, proficiency level, timing and the situations of acquisition, and individual language experiences. For the present study, this means that heritage Tagalog speakers will show varied patterns: some may retain sensitivity in discourse context and word order, while others may rely strongly on something compatible with their dominant-language experience.

2.5.3 Age of onset of bilingualism, age of arrival, and maturational effects

Age of onset of bilingualism and age of arrival are essential variables in heritage language research. Both help identify when sustained exposure to the societal language begins relative to the development of the heritage language. In immigrant-based second language research, age of arrival is typically understood as the learner's age of immigration into the L2-speaking country or community, usually followed by a long-term immersion in that language. However, these two variables are not identical as some speakers may receive exposure to the societal language before migration, and the amount of exposure following the arrival may vary (Birdsong, 2005). For first-generation bilingual children, age of arrival tends to coincide with entry to school into the host country and the beginning of the sustained acquisition of the societal language (Paradis et al., 2026). For Canadian-born HS, age of arrival does not apply, but age of onset remains relevant because English exposure may begin from birth, childcare, or with entry to school.

For heritage speakers (HS), the issue extends beyond when the majority language is acquired. It also concerns when the heritage language (HL) begins to be used less often or becomes less dominant. Montrul (2023) defines heritage languages as minority or minoritized languages acquired as one of the speaker's first languages in a bilingual or multilingual context

(p. 399). These conditions are typically associated with reduced exposure and use during later childhood or adolescence. Therefore, age variables are necessary to discuss as they help establish when the majority language begins to compete with the heritage language in everyday use. However, age of onset and age of arrival should not be interpreted in isolation. Montrul (2016) distinguishes proficiency from dominance by treating dominance as a broader relationship between a bilingual speaker's two languages. In addition to proficiency, dominance reflects the amount and type of input, frequency and context of language use, and biographical factors (Montrul, 2016). So, speakers with similar ages of arrival may then differ in their later exposure, proficiency, and relative dominance in Tagalog and English.

Heritage speakers are early acquirers of the heritage language. As established, early acquisition does not lead to one uniform outcome in adulthood. Montrul (2013) emphasizes that HS range in their abilities, from receptive or limited proficiency to highly developed or native-like command, all depending on their experience with the language across the lifespan (p.153). Her discussion of Spanish gender agreement illustrates that early exposure can support robust knowledge in some areas of grammar. In the gender agreement studies she reviews, many heritage speakers detected gender agreement violations in a way that patterned like baseline speakers, even though their responses were generally slower and less accurate (Montrul, 2013). The author concludes that heritage speakers' performance in this domain reflects both early acquisition and differences in cumulative language experience. Early acquisition can provide a foundation for heritage language knowledge, but it does not guarantee that all linguistic properties will remain equally stable across speakers or throughout the lifespan.

Maturation effects concern how the age and developmental stage of the speaker interact with reductions in HL input and use. Montrul (2023) distinguishes reduced input during childhood from reduced first language use during adulthood. Among speakers who immigrate during adulthoods, input reduction of a mature linguistic system may affect how existing knowledge is accessed or deployed under processing but typically does not affect mental representation. Reduced input in childhood occurs while linguistic representations are still developing, affecting their continued development more directly (Montrul 2023:407), leading to mental linguistic systems that differ from monolingual speakers of the same language. The author also reviews evidence that earlier interruption or reduction of L1 input is associated with greater loss. Montrul (2008) and Bylund (2009) proposed that approximately ages 9 to 12 may demarcate a period of heightened susceptibility to L1 loss, with later studies providing extra support for age effects. However, this range is not a fixed boundary that applies across every speaker or linguistic property (Montrul, 2023: 407).

Research summarized by Paradis et al. (2026) supports the relevance of adolescence within Jia and Aaronson's (2003) longitudinal study that found Mandarin-speaking adolescents who arrived in the United States did not show the same shift toward English observed among younger child arrivals (Paradis et al., 2026:414). These developmental distinctions provide a rationale for comparing speakers who began sustained English exposure in childhood, later childhood, adolescence, or adulthood. Speakers with a longer period of Tagalog development may have had more opportunities to establish relationships between the word order, topic, focus, and prior discourse.

Paradis et al. (2026) provide longitudinal evidence that age of arrival is associated with heritage language maintenance, while reinforcing that children's subsequent outcomes are also tied to schooling and language-environment factors. Their study followed 133 Syrian refugee children across three testing periods at approximately their first five years in Canada. The

children completed a sentence repetition and receptive vocabulary measures in Arabic and English. Their parents reported information about age of arrival, previous schooling in Arabic, family language use, and participation in language-rich activities. Older age of arrival was associated with stronger Arabic abilities across the testing periods, suggesting that children who arrived later had accumulated more Arabic development before sustained English exposure began (Paradis et al., 2026).

However, the advantage associated with older arrival did not prevent changes in language dominance or patterns of plateauing and attrition in Arabic over time. Regardless of age of arrival, the children showed attrition in Arabic sentence repetition performance and plateau in Arabic receptive vocabulary by the third testing period. The younger arrival group performed more accurately in English than in Arabic on the sentence repetition task. The older group showed no significant difference between the two languages on that measure. Both groups also performed less accurately in Arabic sentence repetition at the third testing period than at the second, although, their Arabic receptive vocabulary performance remained stable over the same period (Paradis et al., 2026). The children's language environments also became increasingly oriented toward English over time, especially in interactions with siblings. Stronger later Arabic outcomes were associated most consistently with longer schooling in Arabic and less English use with siblings, which shows that age of arrival operated along with continuing differences in language experience after migration.

These findings show that later arrival may provide stronger initial conditions for HL maintenance among immigrant speakers as they have had more time to develop the HL before sustained societal language exposure begins. However, later arrival does not guarantee continued maintenance, since schooling, family interactions, and ongoing opportunities for HL exposure and use remain important after migration. For Canadian-born heritage speakers, these same experiences shape the amount and continuity of HL exposure from early childhood onward, even though age of arrival is not applicable. The following section considers how family language practices shape HL exposure, use, and maintenance.

2.5.4 Family language practices and maintenance

Although age of arrival reflects the amount of heritage language experience accumulated before sustained exposure to the societal language for immigrant speakers, speakers' later experiences also shape whether the heritage language continues to be heard and used. As discussed in the preceding section, the advantage associated with arrival at an older age did not prevent changes in language dominance, and later Arabic outcomes were also related to schooling, sibling language use, and participation in heritage language activities (Paradis et al., 2026). Family language practices become relevant in discussions of heritage language research because they provide the opportunities to hear and use the heritage language across childhood and later life. This applies to Canadian-born heritage speakers and to speakers who migrated at different ages. The factors considered in this section include heritage language exposure and use in the home, family attitudes and encouragement toward maintenance, and differences in language choice across parents, siblings, and other family members. These factors are important in settings where the HL receives limited support from schools or other institutions, leaving families to provide much of the available language experience (Makarova et al., 2019).

Makarova et al. (2019) examined the relationship between Russian-language exposure, parental attitudes, and the oral Russian proficiency of bilingual or multilingual children between 5 and 7 years of age in Saskatchewan, Canada. The parents of the children completed a

questionnaire concerning their attitudes toward Russian, language use within and outside the family, and their children's overall participation in Russian language and cultural activities. The children were asked to complete a picture-based narrative task used to measure several aspects of their oral proficiency.

The parents generally expressed positive attitudes toward maintaining Russian and reported regular usage of the language with their children, partners, and friends. Although most parents considered it important for their children to speak Russian, that general attitude was not significantly associated with the children's proficiency measures. However, there were several more specific attitude and exposure variables that were associated with aspects of their narrative performance. For example, children's frequency of responding in Russian when addressed in Russian correlated with greater overall language production, longer and more complex utterances, fewer lexical errors, and a faster speech rate. Exposure through parents' reading, Russian songs, television, and participation in Russian language organizations was also associated with measures of lexical production, fluency, utterance complexity, or accuracy (Makarova et al., 2019). These findings emphasize that general support for Russian was less informative than specific practices that provided children to interact with the language. But because the study was correlational, it could not establish whether parents' attitudes and language practices led to stronger Russian proficiency, if children who were already more proficient simply used Russian more often, or if more motivated parents provided more opportunities for language use.

Language use may also differ according to the family member with whom a child is interacting. Salvador et al. (2017) investigated language choice among 12 pairs of Tagalog-English bilingual siblings in Edmonton, Canada. Most participants were born in Canada, although a small number of older siblings were first-generation immigrants (Salvador et al., 2014). The sibling pairs discussed six situations which included contexts the researchers classified as relatively Tagalog-oriented, such as church, grandparents, and Christmas. Potentially English-oriented contexts were also considered, such as school, stores, and restaurants (p. 41). Both older and younger siblings produced substantially more English-only than Tagalog-only utterances. Furthermore, English-only utterances formed the majority in every conversational situation. Neither the siblings' school-status group nor the Tagalog- or English-orientation assigned to the situations significantly affected the percentage of English-only utterances for either the older or younger siblings (Salvador et al., 2017). These findings reflect how sibling communication may become a strongly English-dominant context within the family, supporting the need to differentiate language use with siblings from language use with parents.

Moro and Russo (2025) extend this perspective through their study of family language policy among 26 first- and second-generation Filipino speakers in Italy. The authors explain family language policy may include explicit planning and tacit or unconscious language practices. They argue that it should be understood through family relationships, language attitudes and the everyday practices that shape language use in the home. Their interviews showed that first-generation parents mainly used Filipino together with Italian when speaking with their children. Second-generation speakers also tended to use both languages with their parents. However, they generally preferred speaking Italian with siblings, partners, and children, whereas Filipino was likely to be maintained with parents and grandparents. The study further found that Philippine regional languages were transmitted less consistently across generations, even though attitudes toward Filipino were generally positive and the language remained present in most households (Morro & Russo, 2025).

Together, these studies show that family language practices involve beyond whether a family generally values the heritage language. Maintenance is shaped by the extent to which the HL remains part of everyday family communication and continues to be used across different relationships and activities (Makarova et al., 2019; Moro & Russo, 2025; Salvador et al., 2017). These findings motivate the present study's consideration of Tagalog use with parents, siblings, extended family, and friends, along with family encouragement and exposure through media and other activities. These measures do not directly establish speakers' knowledge of discourse-conditioned Tagalog word order, but they help characterize the amount and range of Tagalog experience that participants have continued to receive across different stages of their heritage language development. Therefore, they may help explain individual differences in judgments and productions beyond age of onset or age of arrival classifications.

Chapter 3: Research Questions & Hypotheses

3.1 *Research questions*

The present study investigates the relationships between discourse context, word order variation, and language background in Tagalog. It specifically asks whether Tagalog speakers are sensitive to discourse conditions when judging and producing predicate-initial and *ay*-inverted constructions. The study addresses the following more specific research questions:

(1) Does the acceptability of *ay*-inversion differ depending on whether the fronted constituent is the actor or the patient, and on the discourse context in which it occurs?

(2) Do speaker groups that differ in age of onset of bilingualism and age of arrival show different patterns in their judgements and productions of Tagalog word order? More specifically, how do native speakers in the Philippines, Canada-based heritage speakers, early/childhood, adolescent, and adult immigrants compare in their sensitivity to discourse-conditioned variation?

(3) Are participants' judgements and productions related to measures of language experience, including language use, exposure, family practices, age of onset of bilingualism, and age of arrival?

3.2 *Predictions for FJT: Philippines-based native speakers*

These predictions concern the Philippines-based native speaker group, which serves as the baseline for the expected relationship between discourse context and Tagalog word order. Based on the literature reviewed in Chapter 2, discourse context is expected to influence participants' judgments of Tagalog word order.

Predicate-initial constructions have been described as the basic clause type in Tagalog whereas *ay*-inversion has been associated with topicality and information structural status of the fronted constituent (Nuhn, 2023). Although *ay*-INV is not restricted exclusively to discourse topics, it is expected to receive its highest ratings when the fronted constituent corresponds to the referent established as the topic by the preceding prompt.

Under this distinction, predicate-initial VOS constructions are expected to remain acceptable across broad focus, narrow focus, and topic contexts because VOS is a canonical Tagalog word order and is not restricted to a single discourse interpretation. However, VOS is expected to be especially natural in broad focus contexts because the entire proposition is introduced as new information and no individual referent has previously been established as the discourse topic (Nuhn, 2023).

A preliminary pilot study with Tagalog-dominant and Philippines-based native speakers was conducted during the development of the Felicity Judgement Task (FJT). The observations from the pilot study suggested that actor *ay*-INV could receive acceptable ratings even when the fronted actor had not been established as a discourse topic. Therefore, the pilot findings informed the predictions that *ay*-INV will not necessarily be rejected outside of topic contexts. However, its rating is expected to be highest when the fronted constituent corresponds to the discourse topic established by the prompt.

In topic contexts, *ay*-inversion is expected to receive higher ratings when the fronted constituent corresponds to the discourse topic established in the context. Thus, *ay*-inverted constructions are expected to be judged as more natural in topic contexts than in broad focus.

Finally, the narrow focus condition is expected to show greater variability in ratings across speakers and constructions than either broad focus or topic contexts. In the narrow focus condition, the subject constitutes the focused new information where the verb and object form part of the established or presupposed information. Because several structures may be used to express this contrast in Tagalog, speakers may consider several structures to be appropriate responses (Nuhn, 2023). As discussed in *Section 2.4.2*, Tagalog speakers may use several structures to express narrow focus: canonical word order with in-situ focus, ang-inversion, reversed ang inversion, and *ay*-inversion (Nuhn, 2023). Because the FJT presents only VOS and *ay*-inverted target sentences, speakers may differ in how appropriate they consider either option to other possible focus constructions. Predicate-initial VOS is still expected to remain acceptable, while *ay*-inversion may also receive positive ratings in some contexts. However, *ay*-inversion is not predicted to receive the same degree of acceptance as in topic contexts, where the fronted constituent corresponds directly to the discourse topic.

The inclusion of actor and patient fronted *ay*-inversion constructions provides an additional test of discourse sensitivity. If speakers are responding to the discourse status of the fronted constituent, both types of *ay*-inversion should receive their highest ratings when the fronted actor or patient corresponds to the discourse topic introduced by the prompt. Alternatively, the agent-first tendencies reviewed in *Section 2.2.2* may influence ratings independently of discourse context (Segalowitz & Galang, 1978; Garcia et al., 2018; Bondoc & Schafer, 2023). If participants show a general preference for actor-initial structures, rather than sensitivity to discourse structure, actor *ay*-inversion may receive relatively high ratings across discourse contexts, whereas patient *ay*-inversion may receive lower ratings even when the patient has been established as the topic. The comparison between actor and patient conditions allows the study to test whether speakers are tracking discourse structure or simply have a preference towards actor-initial word orders.

3.3 Predictions for the Canada-based bilingual groups

Age of arrival in Canada, experience living in an English-dominant country, current Tagalog exposure and use, family language practices, and self-reported proficiency may be related to speakers' judgments and productions of Tagalog word order. Since participant groups differ in these aspects of language experience, they may also differ in how strongly they distinguish between discourse contexts.

Native speakers residing in the Philippines are expected to show the clearest sensitivity to discourse-conditioned variation, resulting in the strongest differentiation across discourse contexts. Specifically, they are expected to rate predicate-initial VOS as acceptable across

contexts, with high ratings in broad focus contexts, and to show the strongest topic ratings for *ay*-inversion.

Heritage speakers based in Canada and early/childhood immigrants may show broader acceptance of actor *ay*-inversion across contexts because actor *ay*-inversion produces a surface SVO order that resembles English word order. If more frequent English use and reduced Tagalog use influence Tagalog word order preferences, then these groups may accept actor *ay*-inversion in contexts where native speakers in the Philippines show stronger discourse-conditioned preferences. However, participants may vary in how clearly their ratings distinguish among broad, narrow, and topic contexts. This variation may be related to their current Tagalog use and exposure, family language practices, and self-reported proficiency.

Adolescent immigrants are represented as an intermediate group. Since they acquired and used Tagalog for a longer period before immigrating to Canada, they may pattern much closer to adult immigrants or native speakers based in the Philippines, in comparison to heritage speaker and early childhood immigrant groups. However, because they moved to an English-dominant environment before adulthood, some variation may emerge depending on the individuals' Tagalog use, English exposure, and proficiency.

Finally, adult immigrant speakers are expected to pattern most closely with Philippines-based native speakers as they acquired and used Tagalog in the Philippines prior to immigration. However, variation within this group may emerge through factors like the previous group. It is important to note that these predictions are treated as tendencies from the results acquired from the tasks. Since there are a small number of participants in each group, the data gathered will be used descriptively to interpret individual differences and identify whether particular participants' judgments or productions may be related to differences in the factors measured in the questionnaire. Table 1 summarizes the predicted patterns for each speaker group.

Table 1. *Summary of Predictions by Speaker Group*

Speaker group	Predicted pattern
Philippines-based native speakers (PH-NS)	Clearest sensitivity to discourse context; VOS expected to be acceptable across contexts; higher ratings in broad focus; <i>ay</i> -INV to receive strongest ratings in topic contexts.
Canada-based heritage speakers (CA-HS)	Broader acceptance of actor <i>ay</i> -INV across contexts and more individual variation in sensitivity to broad focus, narrow focus, and topic contexts.
Early/childhood immigrants	Similar to CA-HS; possible broader acceptance of actor <i>ay</i> -INV and variable differences across contexts.
Adolescent immigrants	Expected to pattern closer to adult immigrants or PH-NS than to CA-HS and Early/childhood immigrants.

Adult immigrants

Expected to pattern most closely with PH-NS, while still showing some variation.

3.4 Predictions for production task

The production task examines if speakers' spontaneous word order choices reflect the patterns observed in the felicity judgement task. Considering participants are not provided with a sentence to evaluate, a wider range of structures is expected to occur than those directly manipulated in the FJT.

In broad focus contexts, predicate-initial structures: VOS or VSO are expected to occur most frequently. In topic contexts, speakers are expected to produce a greater proportion of *ay*-inverted constructions when the discourse prompt establishes a clear topic. Within narrow focus contexts, multiple structures may be produced, including predicate-initial clauses, *ang*-inversion constructions, reversed-*ang* constructions and *ay*-inversion. These structures have all been discussed in the literature as possible responses to focus contexts and may appear in participants' productions depending on how they interpret the prompt (Nuhn, 2023).

With respect to speaker groups, native speakers in the Philippines are expected to show the clearest relationship between discourse context and word order. Heritage speakers may produce a greater proportion of actor *ay*-inverted structures as these resemble English SVO order. Adult immigrant speakers are expected to pattern more closely with native speakers in the Philippines, although variation may occur as a function of current language use and English exposure, as mentioned in the FJT predictions.

If discourse sensitivity is maintained, speakers from all groups should demonstrate systematic relationships between discourse context and word order choice. Word order patterns in production are expected to vary according to the discourse conditions as opposed to occurring randomly across given contexts.

3.5 Task comparison

The FJT and production task were included to examine different aspects of participants' sensitivity to discourse-conditioned Tagalog word order. The FJT assess whether participants judge the sentence with a specific word order as a natural response to the preceding discourse context, while the production task examines which order they select when formulating a response themselves. The production tasks places greater demands on the retrieval and organization of linguistic information because participants must produce a complete sentence without being provided a target form. Montrul et al. (2014). notes that performance may differ across tasks depending on the type of response required and the extent to which a task permits conscious attention to the linguistic form. Comparing the two tasks in the present study makes it possible to determine if discourse-conditioned patterns found in participants' judgements can also be attributed in their spontaneous productions.

Chapter 4: Methodology

4.1 Participants

Participants in this study were Tagalog speakers from both the Philippines and Canada. The participant sample included native speakers based in the Philippines and four groups of Canada-based speakers: heritage speakers, early/childhood immigrants, adolescent immigrants, and adult

immigrants. The native speakers from the Philippines served as a baseline comparison group for examining discourse-conditioned judgements and production patterns in Tagalog.

The participants based in Canada were divided according to their age of arrival in Canada as indicated on the language background questionnaire. For the purposes of the current study, heritage speakers were defined as individuals who were born in Canada or moved to Canada before the age of 6 and primarily exposed to Tagalog in the home. Early/childhood immigrant speakers were defined as individuals who were born in the Philippines and moved to Canada during childhood, approximately between the ages of 6 and 12. Adolescent immigrant speakers were defined as individuals who moved to Canada during adolescence, approximately between the ages of 13 and 17. Adult immigrant speakers were defined as individuals who acquired and used Tagalog in the Philippines before moving to Canada at age 18 or older. These groupings represented differences in age of arrival and in the timing of participants' entry into an English-dominant environment.

All participants were required to be at least 18 years of age and to speak and understand Tagalog. For Canada-based participants, eligibility included exposure to Tagalog through the home, family, schooling, or community use. This included participants with at least one Tagalog-speaking parent, as well as participants who were born in the Philippines and later moved to Canada. The collection methods used for this participant pool was through snowball sampling, online platforms, Filipino community groups, community organizations, and word of mouth. A recruitment poster and brief study description were shared online, and interested participants accessed the study through a link or QR code. Participants were also encouraged to share the study with friends, family members, or other members in their social networks who met the eligibility criteria.

The language background questionnaire distributed in this study also collected basic information in order to group participants appropriately. This included country of birth, current country of residence, age of arrival in Canada, and whether participants had lived in an English-dominant country. These variables were used to distinguish between Philippines-based native speakers, Canada-based heritage speakers, early/childhood immigrants, adolescent immigrants, and adult immigrant speakers. A total of 31 participants completed the study. Of these, 3 were native speakers in the Philippines, 7 were Canada-based heritage speakers who were born or moved to Canada before 6¹, 4 were early/childhood immigrant speakers, 7 were adolescent immigrant speakers, and 10 were adult immigrant speakers. Table 2 summarizes the number of participants in each group, their current ages, and their ages of arrival in Canada, where applicable.

Table 2. *Participants by speaker group*

Speaker group	<i>n</i>	Current age, <i>M</i>	Current age, range	Age of arrival in Canada, <i>M</i>	Age of arrival in Canada, range
Philippines-based native	3	24.33	22-26	N/A	N/A

¹ Within this CA-HS group, 6 participants were born in Canada, and 1 moved before age of 6.

speakers (PH-NS)					
Canada-based heritage speakers (CA-HS) ²	7	27.00	21-35	N/A	N/A
Early/childhood immigrants	4	21.25	19-26	9.5	8-11
Adolescent immigrants	7	24.29	21-26	15	13-17
Adult immigrants	10	32.20	26-47	26.10	18-42

4.2 Experimental materials

The study consisted of three components: a felicity judgement task (FJT), a language background questionnaire, and a recorded production task. The FJT and production task used prompts representing broad focus, narrow focus, and topic contexts. Additionally, the FJT manipulated word order and fronted constituent that distinguished actor and patient fronted *ay*-inversion constructions. The following sections describe the materials created for each task and the counterbalancing procedures used to distribute experimental items.

4.2.1 FJT

The felicity judgment task included three word order conditions: predicate-initial VOS clauses, actor *ay*-inversion, and patient *ay*-inversion.

The first condition consisted of predicate-initial VOS clauses, which served as the baseline word order for comparison. Following previous descriptions of Tagalog as a predicate-initial language (Schachter & Reid, 2018; Nuhn, 2023), the present study used VOS as the predicate-initial comparison structure. Although Tagalog permits both VOS and VSO orders, restricting the stimuli to VOS allowed for a controlled comparison between predicate-initial and *ay*-inverted structures without introducing additional variability from having an alternative predicate-initial word order.

The second condition consisted of actor *ay*-inv, in which the actor was fronted before the inversion marker *ay*. The third condition consisted of patient *ay*-inv, in which the patient was fronted before *ay* and the verb appeared in patient voice. Patient voice morphology was required in this condition so that the fronted patient remained the *ang*-marked pivot of the clause. Overall, these three word order conditions allowed comparisons between predicate-initial and *ay*-inverted structures, and to test if discourse effects extended to both actor and patient fronting.

Then, three discourse conditions were also included: broad focus, narrow focus, and topic contexts. These conditions were selected based on Nuhn's (2023) discussion of information structure in Tagalog, particularly the relationship between discourse context and the distribution of *ay*-inversion. The broad focus condition was designed to approximate sentence-focus interpretation, where the entire proposition is treated as new information. Following Nuhn (2023), sentence focus occurs in response to general questions that do not presuppose a specific

² Age of arrival was not applicable to groups PH-NS and CA-HS because they are either born in Canada or are native speakers living in the Philippines.

participant or event. To create this context, participants were presented with prompts such as *Anong nangyari sa kusina?* “What happened in the kitchen?” In this condition, neither the actor nor the patient was previously established in the discourse.

The narrow focus and topic contexts involved prompts in which one argument was established as the entity in the discourse, while the other argument was the missing information requested by the prompt. For example, (15) established the patient *saging* “banana” as the discourse topic and asked for the identity of the actor, which functioned as the narrow focused argument. Similarly, (16) established the actor *lalaki* “man” as the discourse topic and asked for the patient.

(15) *Eh yung saging, sino ang kumain?*

“What about the banana, who ate it?”

(16) *Eh yung lalaki, ano ang kinain niya?*

“What about the man, what did he eat?”

Both prompts contained a topic and a narrow focus argument. The relevant comparison was whether the constituent preceding *ay* in the target sentence corresponded to the discourse topic or to the narrow focus argument. For example, in (15), patient *ay*-inversion fronted the patient as the discourse topic, whereas the actor *ay*-inversion fronted the focused actor. This allowed the study to examine if *ay*-inversion was judged more natural when the fronted actor or patient corresponded to the discourse topic than to the narrow focus argument. Then, each FJT item paired one discourse prompt with one Tagalog target sentence.

4.2.2 Production task

The production task used visual stimuli depicting transitive events with discourse prompts representing the same broad focus, narrow focus, and topic conditions used in the FJT. Unlike the FJT, the production task did not provide participants with a target sentence to evaluate. Therefore, each item consisted of a visual stimulus and a corresponding discourse prompt designed to elicit a complete Tagalog sentence. This open-response format allowed participants to decide the grammatical structure they see fit for the discourse context.

4.2.3 Language background questionnaire

The language background questionnaire collected information about participants’ linguistic background, language use patterns, and self-reported proficiency in Tagalog and English. These measures were included to characterize the participant sample and explore whether the differences in language experience were associated with their performances on the FJT and production task.

The questionnaire consisted of four sections. The first section collected demographic and language-history information, including country of birth, current country of residence, age of arrival in Canada (if applicable), age of acquisition of Tagalog, languages used during schooling, and knowledge of other Philippine languages. These variables were used to classify participants according to language background and immigration history as Philippines-based native speakers, Canada-based heritage speakers, early/childhood immigrants, adolescent immigrant, or adult immigrants.

The second section examined language use across a variety of contexts including parents or caregivers, siblings, extended family members, friends, school or work environments, internal thoughts, and media consumption. Participants reported their answers on a 5-point Likert scale ranging from predominantly Tagalog to predominantly English.

The third section focused on family language practices and language attitudes. Participants reported the languages used in the home during childhood, the languages they used with family members, the degree of encouragement they received to use Tagalog, and their comfort using Tagalog in everyday situations.

The final section assessed self-rated proficiency in Tagalog and English. Participants were asked to rate their speaking and comprehension abilities in both languages, using another 5-point Likert scale ranging from very low proficiency to excellent proficiency. These sections provided overall language backgrounds in which the measures were used to explore possible relationships between participants' language experience and their performance on the experimental tasks.

4.2.4 Counterbalancing and lists

Three experimental lists, namely List A, B, and C were created to distribute the FJT stimuli across participants while minimizing repetition effects. The lists were constructed using a counterbalanced design in which discourse condition and word order were systematically rotated across lexical sets. Across the three lists, lexical sets were rotated through the discourse and word order conditions so that each participant saw only one version of a given lexical item. Each list contained 40 trials that had an equal number of predicate-initial and *ay*-inverted sentences, as well as an equal number of actor and patient conditions. Participants were then assigned to one of the three lists through Gorilla Experiment Builder. This design reduced the likelihood that participants would become aware of the experimental manipulation by seeing many repeated versions of the same sentence.

The production task was also distributed across three experimental lists (A, B and C). Each list contained 15 stimuli representing broad focus, narrow focus, and topic contexts. Each list had a total of 15 stimuli, including five broad focus, five narrow focus, and five topic trials. Like the FJT, each participant was assigned to only one of the three lists. The production lists were constructed so that discourse contexts were distributed across lexical items and visual stimuli to reduce repetition and ensure that all conditions were represented across the participant sample.

4.3 Procedure

The study was hosted online using Gorilla Experiment Builder, a web-based platform designed for behavioural and linguistic research. This platform was selected because it allowed the integration of the FJT, language background questionnaire, and production task within a single experiment. It was also used to assign participants to experimental lists and collect both rating and audio-recording data.

Each participant accessed the study remotely by scanning the QR code on the recruitment's flyer or link to complete the tasks remotely. Before beginning the experimental tasks, participants were presented with an informed consent form describing the purpose of the study, tasks, participant rights, confidentiality, prize draw, use of results, and overall consents. Participants who did not provide consent were directed to an exit page and were not permitted to continue.

Since the production task relied on audio recording, participants were also instructed to complete the study using a laptop, desktop, or tablet. Mobile devices were discouraged because

of potential recording limitations. Then, they were also instructed not to use Safari as the main browser, or any iOS devices because of compatibility issues with Gorilla’s audio recording functions.

The study consisted of five workflow stages: (1) informed consent, (2) felicity judgment task, (3) language background questionnaire, (4) production task, and (5) optional prize-draw form. Participants were assigned to one of the experimental lists using Gorilla’s randomization function, to ensure everyone completed only one matching version of the task materials. Before starting the FJT, participants were presented an instruction screen, explaining the task requirements. On each trial, participants viewed a discourse prompt followed by a target Tagalog sentence. They answered the rating question *Gaano ka-natural ang pangungusap bilang sagot sa tanong?* “How natural is the sentence as an answer to the question?” This wording directed participants to evaluate the contextual appropriateness of the sentence. The target sentence was evaluated using a six-point Likert scale ranging from 1 (*hindi natural na sagot* “very unnatural response”) to 6 (*napaka-natural na sagot* “very natural response”). The other points of the scale represented increasing degrees of naturalness of the sentence. Figure 1 shows an example FJT item as it appeared in Gorilla Experiment Builder. The item presents a broad focus prompt paired with a predicate-initial VOS sentence.

Anong nangyari sa kusina?

Kumain ng saging ang lalaki

Gaano ka-natural ang pangungusap bilang sagot sa sitwasyon?

Hindi natural 1 2 3 4 5 6 Napaka-natural

Next

Figure 1. Example of felicity judgement task trial displayed in Gorilla Experiment Builder.

Following the FJT, participants completed the language background questionnaire. They provided demographic and language history information, and completed the language use, family language practices, comfortability, and self-reported proficiency items described in *Section 4.2.3*.

Before beginning the production task, participants viewed an instruction screen explaining the task requirement and completed a practice trial to familiarize themselves within the expected response format. For each trial, participants viewed a visual stimulus together with a discourse prompt and were instructed to respond orally in Tagalog using a complete sentence. The audio

responses were recorded using Gorilla's built-in recording function and were automatically stored for later transcription and analysis. An example of a production trial is shown in Figure 2.



Figure 2. Example production task trial displayed in Gorilla Experiment Builder.

After completing the study, participants were presented with a final screen thanking them for their participation and were given an option to provide an email address to enter a gift-card draw. Email addresses were then collected separately from experimental responses to maintain anonymity.

4.4 Data Analysis

All data from the felicity judgement task, language background questionnaire, and production task were analyzed separately. These results were examined descriptively because the speaker groups were small and unequal in size. The following sections describe how responses from each task were prepared and summarized.

4.4.1 FJT

The responses from the FJT were coded according to speaker group, construction, discourse condition, and type of fronted constituent. Participants rated each item on the 6-point Likert scale as described in *Section 4.3*. The mean ratings were first calculated for each participant within each construction and discourse condition. These participant means were then averaged within each speaker group to obtain the group means presented in Chapter 5. The results were examined by comparing ratings across the discourse conditions and between VOS and *ay*-inversion. The analysis was specifically centred in whether *ay*-inversion received higher ratings when the fronted actor or patient corresponded to the discourse topic.

4.4.2 Language Background Questionnaire

Responses from the questionnaire were summarized according to speaker group. Current language use was divided into three composite measures: language use composite, external language use, and general language use. For each of the composite, a mean was calculated first for each participant using the relevant questionnaire items. Then, participant means were averaged within each speaker group.

The family language use composite is composed of questions on language use with parents or caregivers, siblings, and extended family members. The external language use composite included questions on language use with friends and at school or work. Finally, the general language use composite integrated daily language exposure, language used when thinking, and media consumption. The responses in which a participant chose “N/A” were excluded from the calculation of their means.

Family language practices were summarized separately by using participants’ ratings of the language used by family members with them during childhood, the language they used with family members during childhood, and their current family language use. Lastly, the self-rated Tagalog proficiency was also analyzed as a separate factor, by which group means were calculated for each of these measures.

For the current language use and family practice measures, lower scores indicated more Tagalog-oriented language use, respectively, higher scores signified more English-orientation. Higher ratings for self-rated proficiency measures specified greater self-rated Tagalog proficiency.

4.4.3 Production task

Audio responses from the production task were transcribed and coded according to speaker group, discourse condition, and construction type. Each response was classified as predicate-initial VOS, predicate-initial VSO, actor *ay*-inversion, patient *ay*-inversion, or Other. In the narrow focus condition, two additional construction types were identified: reversed-*ang*, and *ang*-inversion. As described in Section 2.4.2, regular *ang*-inversion places the focused constituent initially, followed by an *ang*-marked predicate. An example from the production data is provided in (17). In reversed *ang*-inversion, the backgrounded predicate occurs first with the focused *ang*-marked constituent, followed by *ay*, as seen in (18). Both responses were produced from the prompt *Sino ang kumagat ng mansanas?* “Who bit the apple?”

(17) Regular *ang*-inversion

Ang	kulot	na	batang	lalaki	ang	kumagat	ng	mansanas.
ANG	curly	LK	child.LK	boy	ANG	bite.PERF.AV	NG	apple

“The curly-haired boy was the one who bit the apple.”

(18) Reversed *ang*-inversion

Ang	kumagat	ng	mansanas	ay	ang	batang	lalaki.
ANG	bite.PERF.AV	NG	apple	INV	ANG	child.LK	boy

“The one who bit the apple was the boy.”

Furthermore, responses classified as Other when they could not be assigned to the predefined construction types relevant to the study's hypotheses, or structures reviewed in Chapter 2. This category included existential constructions, responses with an omitted argument, and some with structural or case marking irregularities. These responses were retained in the total number of usable productions and displayed in the production figures, although they were not divided into additional structure categories or analyzed further. Only usable audio recordings were included in the analysis; missing, corrupted, incomplete, or unintelligible recordings were excluded. Because of this, the number of participants and usable response differed across speaker groups and discourse conditions.

For each speaker group, responses were counted separately for the broad focus, narrow focus, and topic conditions. Within each condition, the percentage of each construction type was calculated out of the total number of usable responses by that speaker group. The results were reported as raw frequencies and percentages.

Chapter 5: Results

5.1 Participant Inclusion

A total of 32 participants contributed data to the study. All 32 participants had usable FJT and language background questionnaire (LBQ) information. Only 15 participants contributed to the production task data. The smaller production sample was a result from missing, incomplete, or corrupted audio recordings. Table 3 presents the exact number of participants included in each task by speaker group. The FJT results are presented consecutively by speaker group in the next section. Higher mean ratings indicate that a sentence was judged to be a more natural response to the preceding discourse prompt.

Table 3. *Number of participants in each task and speaker group.*

Speaker Group	FJT, <i>n</i>	Production, <i>n</i>	LBQ, <i>n</i>
PH-NS	4	1	4
CA-HS	7	2	7
CA-EI	4	3	4
CA-ADOL	7	5	7
CA-AI	10	4	10
Total	32	15	32

5.2 Results for FJT

The FJT results are presented first for the Philippines-based native speaker group, followed by the four Canada-based groups. The groups based in Canada are organized according to age of arrival, beginning with adult immigrants and ending with heritage speakers. Figure 3 presents the mean ratings for the Philippines-based native speaker group. In the actor conditions, VOS received identical mean ratings in broad and narrow focus, at 3.96, and a relatively higher mean of 4.42 in the topic condition. Actor *ay*-inversion received a mean of 3.96 in broad focus, 4.13 in narrow focus, and 4.75 in the topic condition. The two actor constructions received similar ratings in both broad and narrow focus, with actor *ay*-inversion having the highest mean when the actor was the discourse topic.

A stronger contrast between conditions was observed in the patient conditions. Patient VOS scored relatively high mean ratings in broad and narrow focus at 4.75 and 4.50, but a lower mean of 3.25 in the topic condition. By contrast, patient *ay*-inversion showed the opposite pattern. It received a mean of 3.54 in broad focus, decreased to 2.54 in narrow focus, and increased to 4.54 in the topic condition. It is evident that the ratings of the two patient constructions changed across discourse conditions. Patient VOS was rated as more acceptable than patient *ay*-inversion in broad and narrow focus. However, in the topic condition, patient *ay*-inversion was rated as more acceptable than patient VOS., where the largest contrast in the PH-NS occurred.

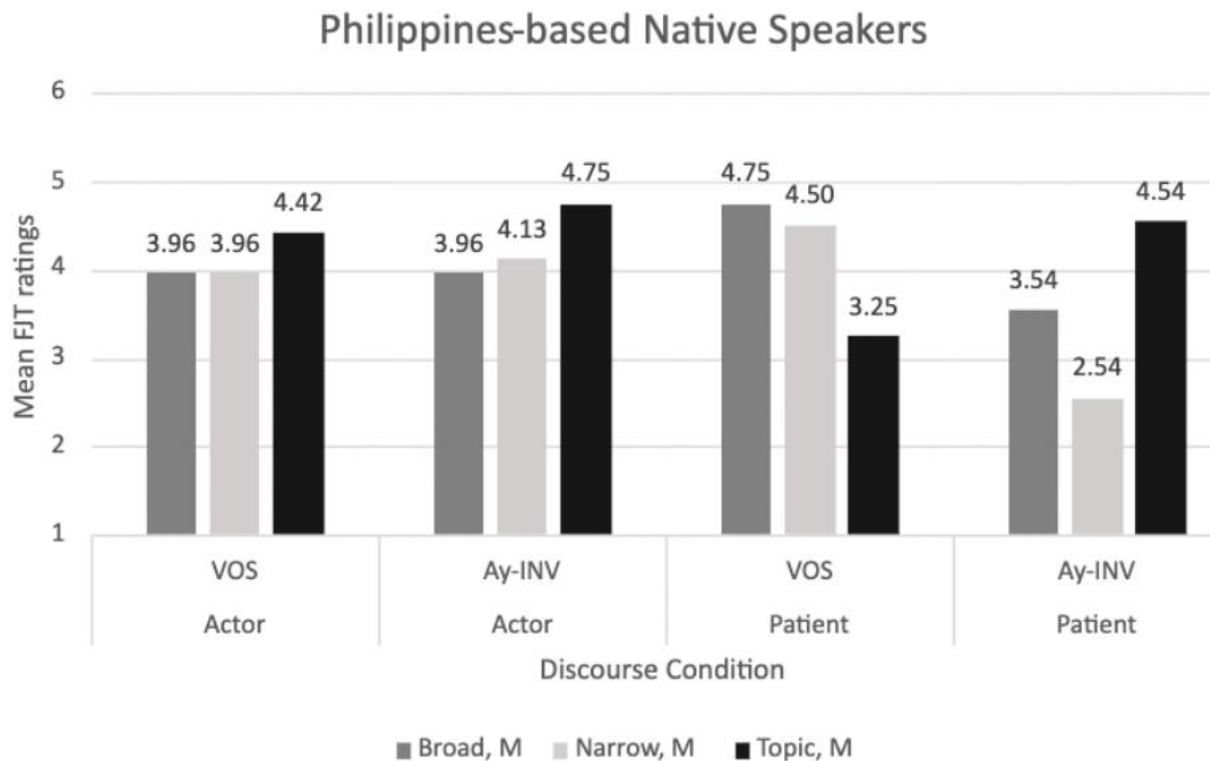


Figure 3. Mean FJT ratings by construction and discourse condition: Philippines-based native speakers (PH-NS).

Figure 4 provides the corresponding mean ratings for the Canada-based adult immigrant group. Actor VOS received relatively high ratings across three conditions: 4.60 in broad focus, 4.18 in narrow focus, and 4.84 in topic. Actor *ay*-inversion received means of 4.37 in broad focus, 4.28 in narrow focus, and 5.12 in topic. Then, for patient VOS, the highest mean was observed in narrow focus at 5.03, followed by broad focus with 4.63, and 4.24 in topic condition. It is also evident that patient *ay*-INV increased across the three conditions, from 3.11 in broad focus to 3.36 in narrow focus, and 3.74 in topic. Additionally, both the two actor constructions acquired similar ratings within each discourse condition. In the patient conditions, VOS was rated more highly than *ay*-inversion across all three contexts. However, the difference between the two patient constructions was smallest in the topic condition, where patient VOS displayed a mean of 4.24 and patient *ay*-inversion with a mean of 3.74.

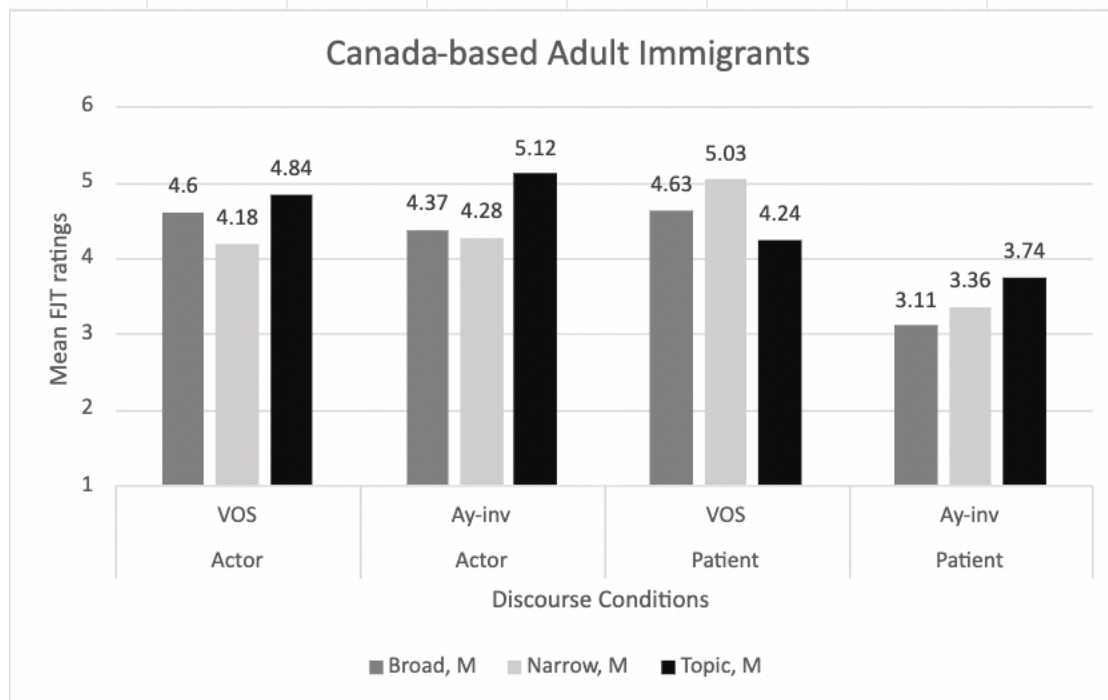


Figure 4. Mean FJT ratings by construction and discourse condition: Canada-based adult immigrants.

The ratings for Canada-based adolescent immigrant group are summarized in Figure 5. Actor VOS received a mean of 3.90 in broad focus, 3.32 in narrow focus, and 4.49 in topic. Actor *ay*-inversion received a comparatively similar rating across conditions, with means of 3.15 in broad focus, 3.46 in narrow focus, and 3.42 in topic. For patient VOS, the highest mean received was in narrow focus at 4.35, compared with 3.88 in topic and 3.77 in broad focus. Then, patient *ay*-inversion received lower ratings with means of 2.56 in broad focus, 3.05 in narrow focus, and 3.19 in topic. Across all three patient conditions, VOS was rated highly than *ay*-inversion. In the actor conditions, VOS was rated highly in broad focus and topic, while actor *ay*-inversion was only slightly higher narrow focus. Even though patient *ay*-inversion received its highest mean in the topic condition, it remained lower than patient VOS within that condition.

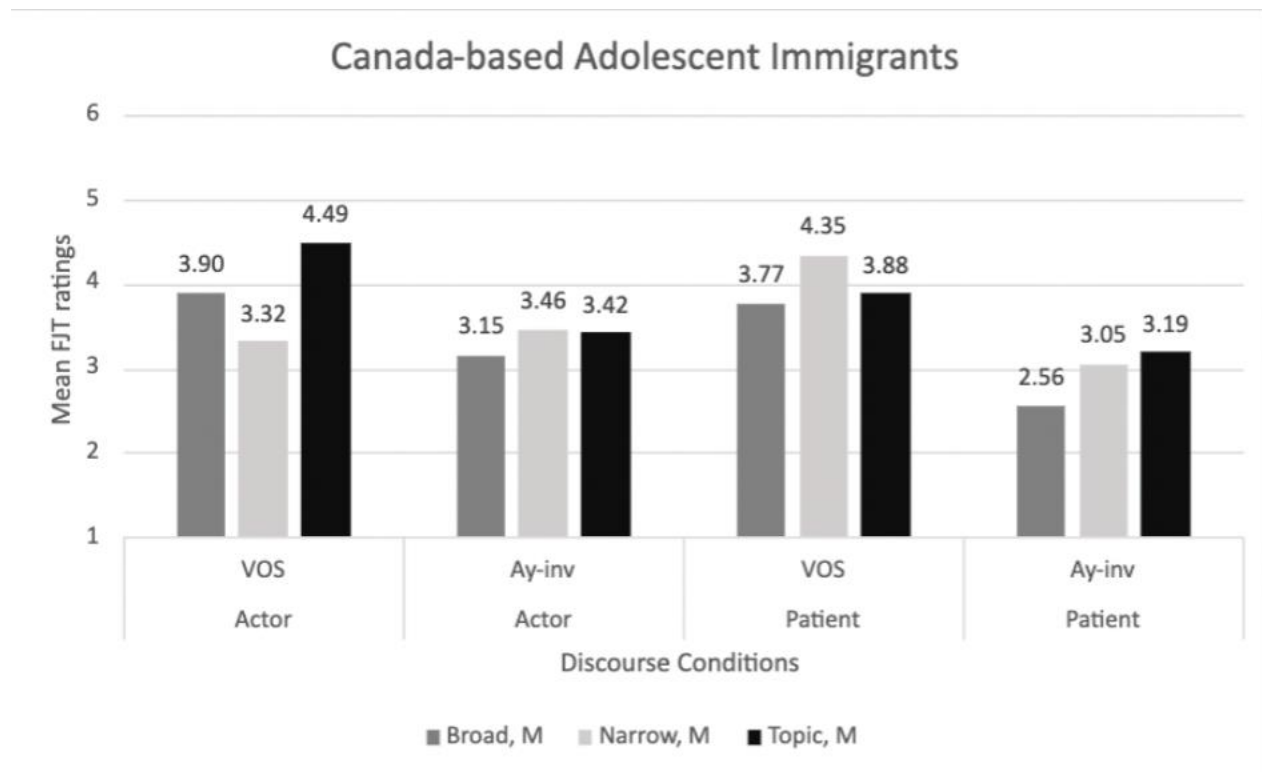


Figure 5. Mean FJT ratings by construction and discourse condition: Canada-based adolescent immigrants.

Figure 6 shows how actor VOS displayed relatively high ratings across all three conditions in the Canada-based early/childhood immigrant group. The mean increased from 4.63 in broad focus, to 5.02 in narrow focus, and 5.33 in topic. Actor *ay*-inversion was also rated highly across conditions with means of 4.83 in broad focus, 5.40 in narrow focus, and 4.96 in topic. Patient VOS received a mean of 4.08 in broad focus, 4.42 in narrow focus, and 5.10 in topic. Contrastively, patient *ay*-inversion had lower ratings: 3.90 in broad focus, 3.17 in narrow focus, and 3.21 in topic. Additionally, the *ay*-inversion in actor conditions was rated slightly higher than VOS in broad and narrow focus and VOS was rated more highly in topic. For the patient conditions, VOS was rated higher than *ay*-inversion across all three discourse contexts. The largest difference happened in the topic condition, where patient VOS received a mean of 5.10 and patient *ay*-inversion only had 3.21.

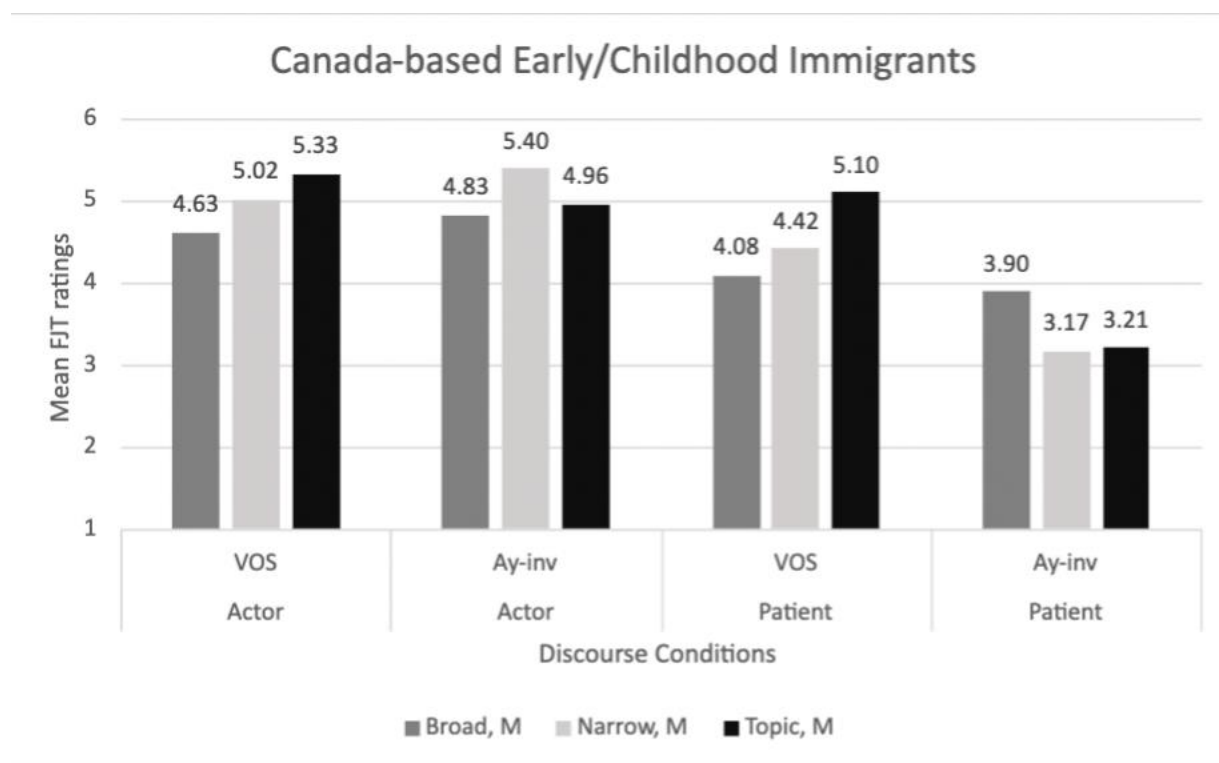


Figure 6. Mean FJT ratings by construction and discourse condition: Canada-based early/childhood immigrants.

In terms of the Canada-based heritage speaker group, Figure 7 shows that actor VOS received its highest mean in broad focus at 4.61, followed by topic with 3.90, and 3.14 being the lowest in narrow focus. In contrast, actor *ay*-inversion received similar ratings across the three conditions: 4.33 in broad focus, 4.30 in narrow focus, and 4.57 in topic conditions.

For the patient constructions, patient VOS received its highest mean in broad focus with 4.65, narrow focus at 4.24, and topic at 3.48. Patient *ay*-inversion received a mean of 2.87 in broad focus, then increasing to 3.56 for narrow focus, and 3.18 for topic. Figure 4 displays how patient VOS was rated more highly than patient *ay*-inversion across all three discourse conditions. The difference between the two constructions was most pronounced in broad focus and less so in narrow focus and topic. Unlike the PH-NS group, the CA-HS group did not show a reversal in favour of patient *ay*-inversion when the patient was the discourse topic.

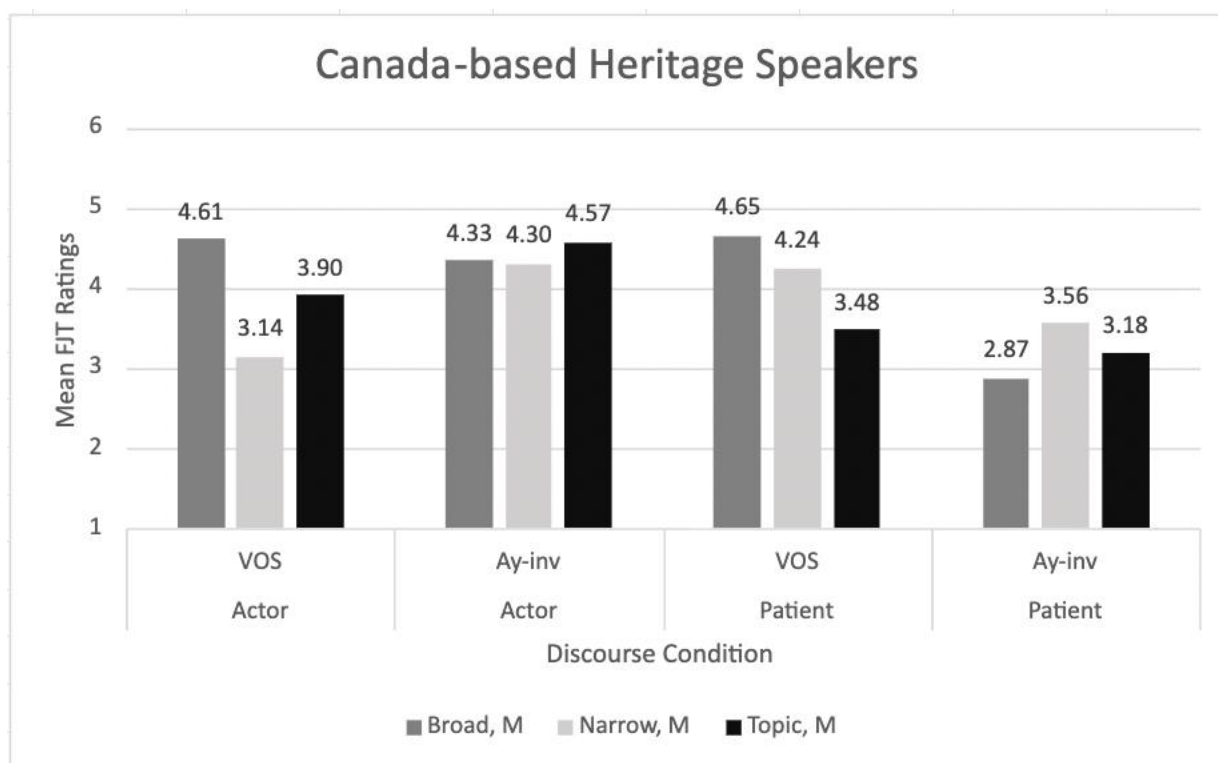


Figure 7. Mean FJT ratings by construction and discourse condition: Canada-based heritage speakers (CA-HS).

Across the five speaker groups, it seems that there was no consistent preference for *ay*-inversion over VOS across all actor and patient conditions. The CA-HS, CA-EI, and CA-AI groups rated actor *ay*-inversion relatively high. However, patient *ay*-inversion was rated below patient VOS in every discourse condition for all four Canada-based groups. Only the PH-NS showed the clearest group contrast under the patient-topic condition. These native speakers based in the Philippines rated patient *ay*-inversion more highly than patient VOS when the patient was the discourse topic, which none of the Canada-based groups showed this reversal. For patient-topic condition, the difference between VOS and *ay*-inversion was smallest for CA-HS, then CA-AI and CA-ADOL, but CA-EI showed a considerable larger difference. Therefore, the PH-NS group was the only one whose relative ratings of the patient constructions changed across discourse conditions; with patient VOS being rated more highly in broad and narrow focus, while patient *ay*-inversion higher in the topic condition.

5.3 Language background questionnaire results

The language background questionnaire results were used to describe differences in participants' current language use, family language practices, and self-rated Tagalog proficiency. For both the current language use and family practice measures, lower scores indicated more Tagalog-oriented use, whereas higher scores expressed more English-oriented use. For the proficiency measures, higher ratings signified greater self-rated Tagalog proficiency.

Figure 8 summarizes the mean current language use composite scores for the five speaker groups. Across all groups, external language use was more English-oriented than family

language use. The PH-NS group reported the most Tagalog-oriented family use with a mean of 1.94, followed by the CA-ADOL group with 2.12. In contrast, the CA-HS group had the most English-oriented family use mean at 3.45. For external language use, CA-HS and CA-EI groups nearly had identical means of 4.14 and 4.13. The CA-ADOL group also showed a relatively English-oriented external use mean of 4.07. Among the Canada-based groups, the CA-AI group had the lowest external use score at 3.40, which was only slightly lower than the PH-NS mean of 3.50. General use scores were the highest for CA-EI and CA-HS, at 4.08 and 4.00, while PH-NS had the lowest mean at 3.08. It is also important to note that two of the four PH-NS participants reported speaking other Philippine languages. One participant reported Pangasinan and Ilocano and another spoke Kapampangan. The language use patterns of this group should be understood within a broader multilingual context.

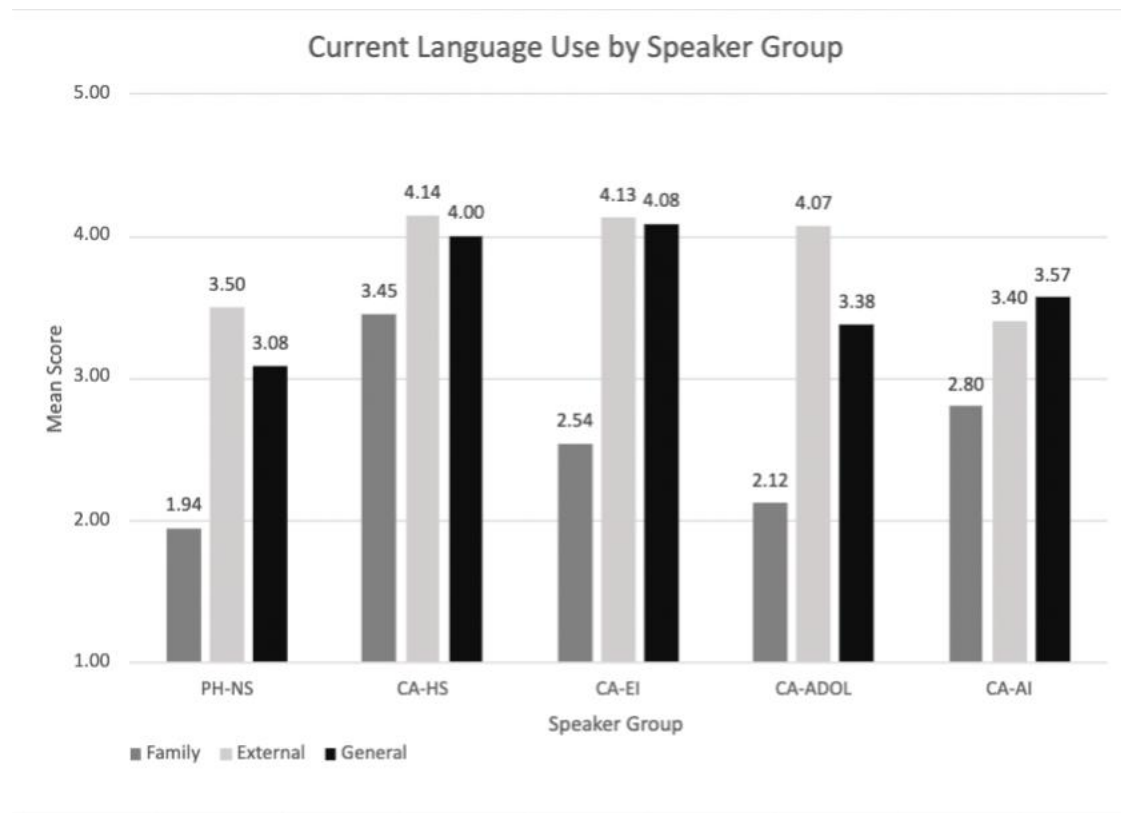


Figure 8. Mean current language use composite scores by speaker group.

The family language practice mean ratings are shown in Figure 9, including childhood input, childhood use, and current family language across the five groups. The CA-EI group had the most Tagalog-oriented childhood practices with means of 1.25 for both input and use. The CA-ADOL group also presented relatively Tagalog-oriented patterns with means of 1.57 and 1.71. Meanwhile, the CA-HS group exhibited the largest difference between childhood input and use. Its input mean was at 2.00, then increased to 3.50 for childhood use. For the remaining groups of PH-NS, CA-EI, CA-ADOL and CA-AI, current family use means were higher than childhood use means, which indicates a more English-oriented family language use in the current period than during childhood.

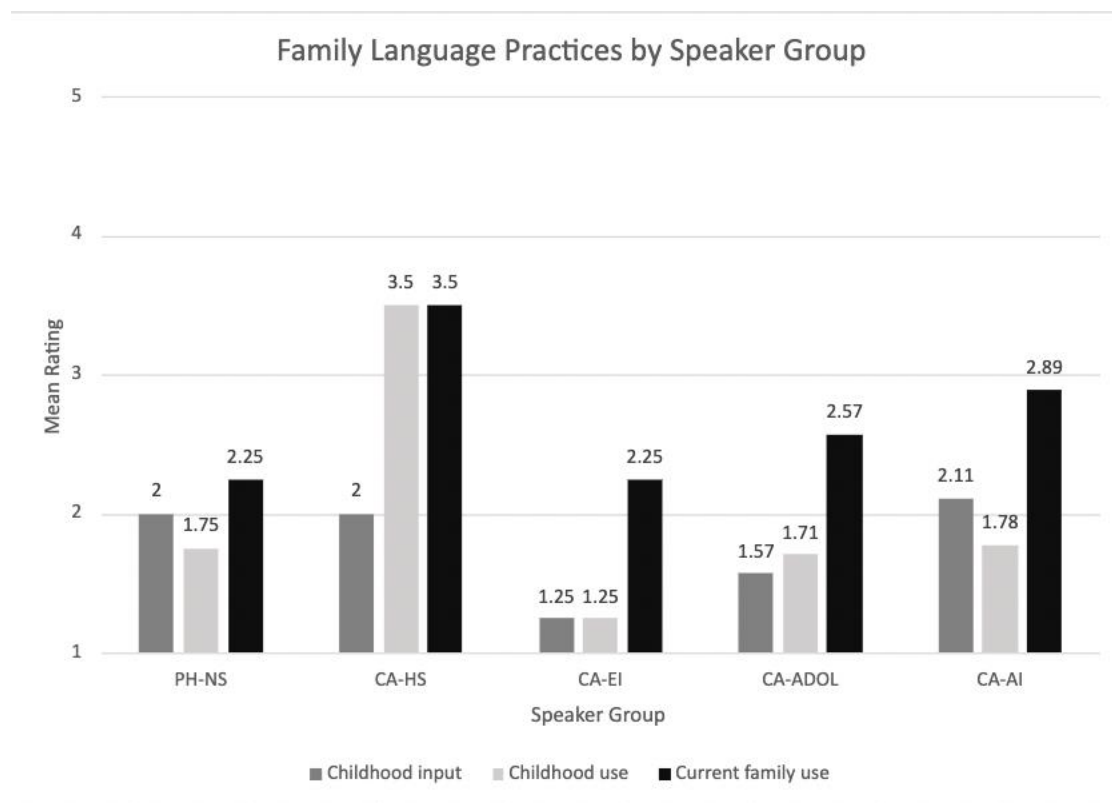


Figure 9. Mean family language practice ratings by speaker group.

Finally, Figure 10 compares the groups' mean self-rated proficiency for speaking and understanding Tagalog. The CA-ADOL group contained the highest ratings for both speaking and understanding at 4.86 and 5.00. The CA-HS group had the lowest speaking mean at 2.71, although its understanding mean was higher at 4.00. This was the largest difference between speaking and understanding between the groups. The CA-EI group also had a slightly higher understanding mean than speaking mean at 4.00 and 3.75. In contrast, the CA-AI group also had a slightly higher speaking mean of 4.50 than its understanding means of 4.40.

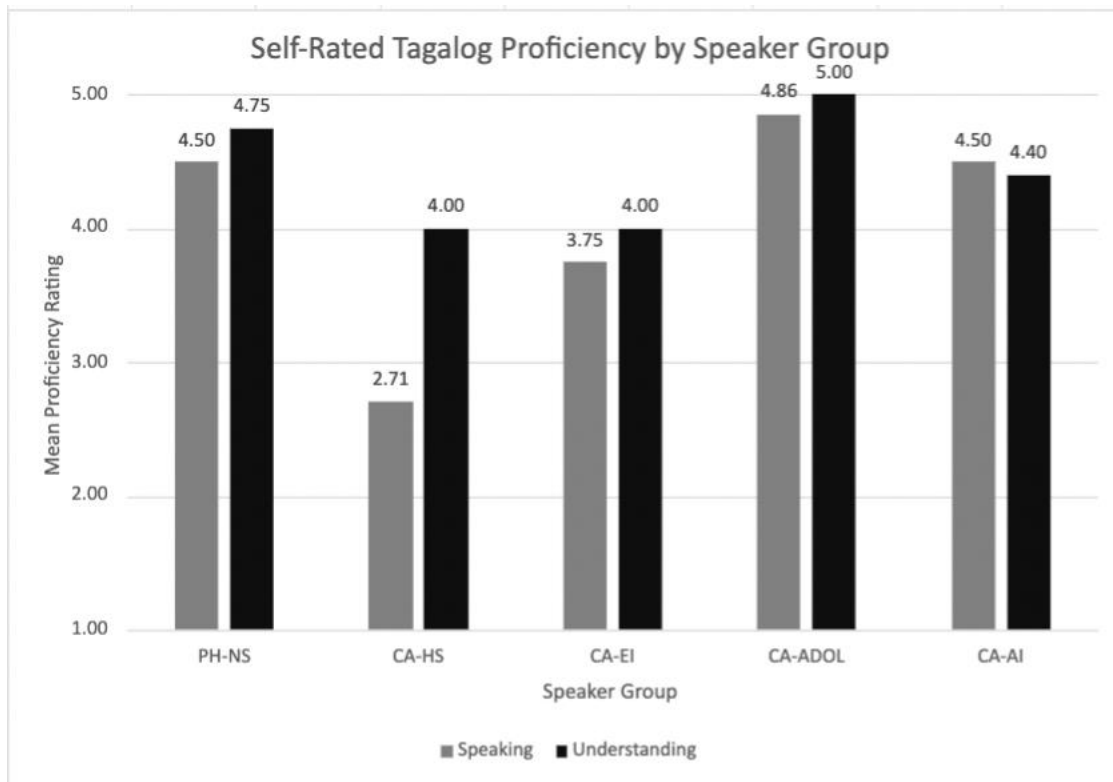


Figure 10. Mean self-rated Tagalog proficiency by speaker group.

5.4 Production Results

Production data were available for 15 participants. Figures 11 to 13 present the proportions of usable responses classified under each construction within the three discourse conditions.

Figure 11 presents the distribution of constructions produced in the broad focus condition. The single PH-NS participant produced predicate-initial constructions in all five usable responses, consisting of 4 VOS responses (80%) and 1 VSO response (20%). The CA-AI group produced more varied distribution in which actor ay-INV was the most frequent construction, accounting for 7 of 19 usable responses (36.8%) from the four participants. This was followed by Other constructions with 6 responses (31.6%), VOS with 5 responses (26.3%), and VSO with 1 response (5.3%). For the CA-ADOL group, VOS was the most frequent construction, totaling of 8 out of 24 responses (33.3%). Actor ay-INV occurred in 7 responses (29.2%), and 6 responses were classified as Other (25%). VSO accounted for 2 responses (8.3%), and patient ay-INV occurred once (4.2%). The CA-EI group produced Other constructions most frequently, accounting for 8 of 14 responses (57.1%), 4 responses using actor ay-INV (28.6%), and 2 responses in VOS (14.3%). Lastly, the CA-HS group had VOS and Other constructions occur equally often, with each totalling for 4 of 10 responses (40%). The remaining 2 responses were VSO constructions (20%).

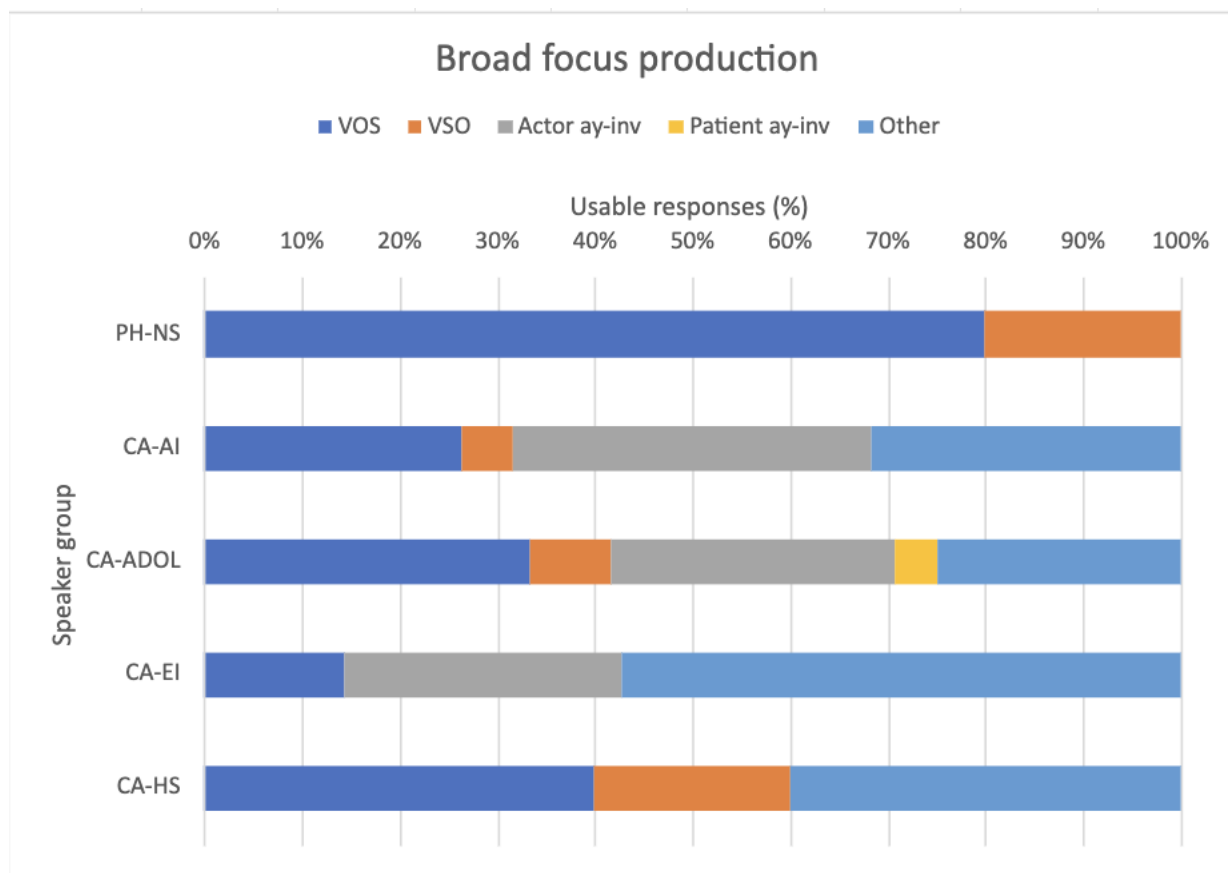


Figure 11. Sentence types produced in the broad focus condition by speaker group.

Figure 12 presents the distribution of constructions produced in the narrow focus condition. The single PH-NS participant produced 3 VOS responses (60%), 1 REV-ang response (20%), and 1 ang-INV response (20%). REV-ang was the most frequent construction in the CA-AI group, with 11 out of 18 responses (61.1%). Actor ay-INV occurred in 6 responses (33.3%), while VOS only occurred once (5.6%).

The CA-ADOL group produced actor ay-INV the most with 10 of 25 responses (40%). VOS accounted for 8 responses (32%), REV-ang 5 responses (20%), with VSO and Other for 1 response each (4%). CA-EI group displayed a varied distribution. Other constructions accounted for 6 of 15 responses (40%), followed by REV-ang with 5 responses (33.3%). Actor ay-INV had 2 responses (13.3%), with VOS and VSO each occurring once (6.7%). In the CA-HS group, REV-ang was the most frequent construction with 6 out of 10 responses (60%), actor ay-INV had 2 responses (20%), with VOS and Other each happening once (10%).

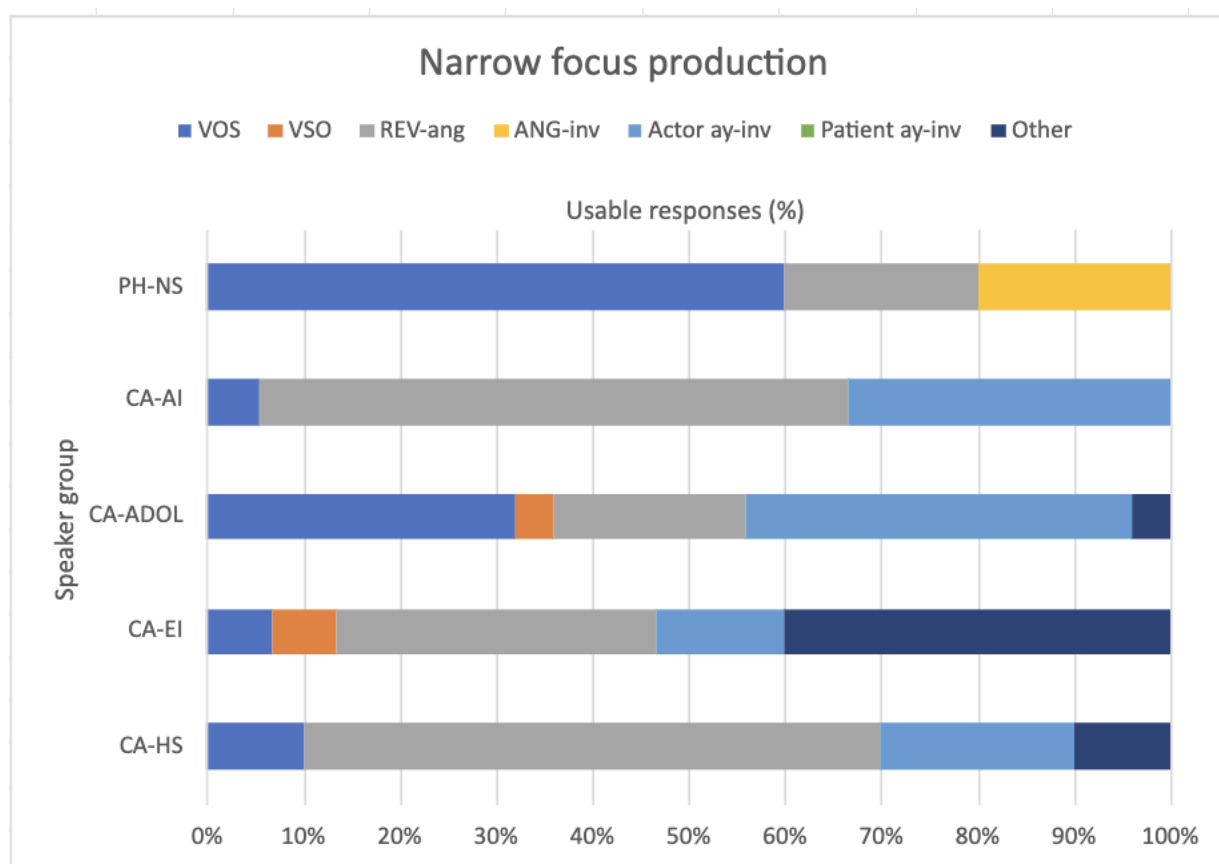


Figure 12. Sentence types produced in the narrow focus condition by speaker group.

Lastly, Figure 13 displays the distribution of constructions produced in the topic condition. The single PH-NS participant again produced only predicate-initial constructions, consisting of 4 VOS responses (80%), and 1 VSO response (20%).

Actor ay-INV was the most frequent construction in the CA-AI group by which 12 out of 19 responses were uttered (63.2%). VOS occurred in 3 responses (15.8%), while VSO and Other each occurred in 2 responses (10.5%).

For the CA-ADOL group, VOS and actor ay-INV was produced equally often, with each accounting for 11 of 24 responses (45.8%). VSO and Other each occurred once (4.2%). The CA-EI group produced actor ay-INV the most with 7 out of 15 responses (46.7%). Other constructions accounted for 5 responses (33.3%), VOS for 2 responses (13.3%), and VSO for 1 response (6.7%). Finally, CA-HS produced Other constructions most frequently, accounting for 5 of 10 responses (50%). VOS occurred in 3 responses (30%), VSO and actor ay-INV each occurred once (10%).

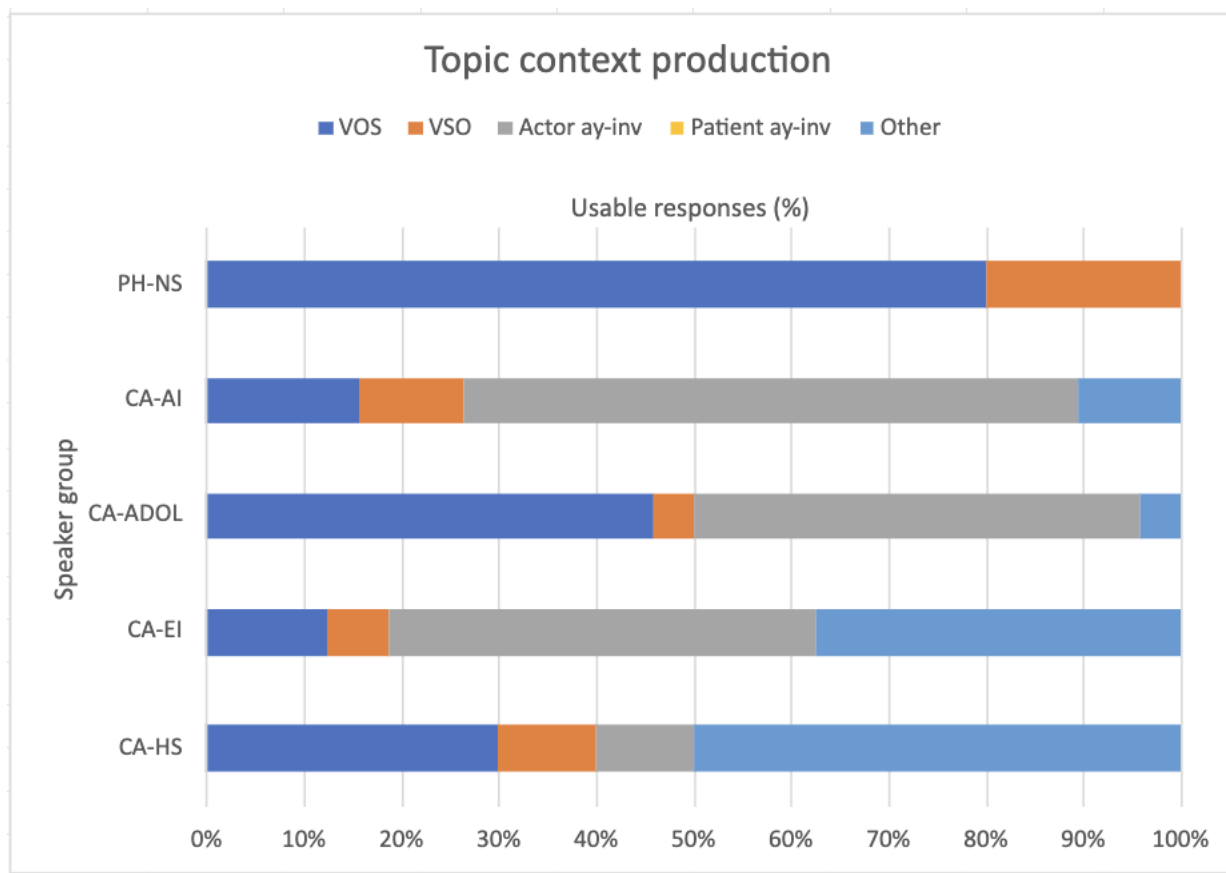


Figure 13. Sentence types produced in the topic condition by speaker group.

Responses that were classified as Other included several different construction types, represented in examples (19)-(22). In the broad focus condition, these included existential constructions with *may* “there exists”, as in (19). Other responses omitted one of the displayed arguments in the stimulus, as illustrated in (20). In the narrow focus condition, a ditransitive construction was given that was outside the coding scheme for transitive clauses containing an actor and a patient, as shown in (21). In the topic condition, one response contained a case marking irregularity where both noun phrases were marked with *ang*, as in (22). Most of these responses were interpretable Tagalog productions, but they did not fit the construction categories used in the analysis.

(19) Existential construction

May nagluto sa kusina

“Someone cooked in the kitchen.”

(20) Argument omission

Uminom ang babae.

“The woman drank.”

(21) Ditransitive construction

Binigyan ng lalaki ng regalo yung babae.

“The man gave a woman a gift.”

(22) Irregular case marking

**Pumitas ang bulaklak ang babae.*

Intended: “The woman picked the flower.”

Chapter 6: Discussion

This chapter discusses the findings in relation to the three research questions presented in Chapter 3. *Section 6.1* examines whether the acceptability of VOS and ay-INV differed according to discourse context and the type of fronted constituent. *Section 6.2* considers if the speaker group patterns followed differences in age of onset of bilingualism and age of arrival. Lastly, *Section 6.3* seeks to investigate the relation between the patterns to participants’ current language use, childhood language experience, family language practices, and self-rated Tagalog proficiency.

6.1 Discourse context and Tagalog word order

6.1.1 Actor constructions

Chapter 3 predicted that actor ay-INV would remain acceptable outside topic contexts but would receive its highest ratings when the fronted actor corresponded to the topic. The findings provided only partial support for this prediction. The PH-NS, CA-HS, and CA-AI groups rated actor ay-INV most highly in the topic condition, although the size of the increase differed accordingly per group. In contrast, the CA-EI group gave the construction its highest rating in narrow focus, as such, the CA-ADOL group did not show a clear topic advantage. Therefore, this inversion remained acceptable across the three discourse conditions, rather than exhibiting a uniform association with topicality.

This broad acceptability of actor ay-INV is compatible with the discussion presented in Chapter 2. Although the construction has been frequently associated with topicality, Nuhn (2023) emphasizes that the constituent preceding *ay* is not restricted to topic interpretation; the information-structural status of the fronted constituent must be determined in relation to the surrounding discourse. The present findings similarly suggest that actor ay-INV may be felicitous even when the actor had not been explicitly established as the topic. Because the construction remained acceptable across broad focus, narrow focus, and topic contexts, the results provide no evidence that its felicity was sensitive to discourse contexts, suggesting topicality was not required for actor ay-INV to be judged felicitous.

The narrow focus condition did not produce a uniform preference for either actor VOS or actor ay-INV across the speaker groups. However, this pattern should not be treated as direct evidence for the range of narrow focus strategies described by Nuhn (2023). He identifies three strategies for expressing a narrow argument focus on Tagalog: canonical predicate-initial order with in-situ focus, regular *ang*-inversion, and reversed-*ang*. Of these available strategies, the canonical in-situ focus is most directly comparable to the actor VOS condition in the present study. Since the FJT tested only VOS and ay-INV, it did not include the full range of structures speakers might consider appropriate narrow focus context. The results show only that the two constructions tested did not receive a linear advantage across speaker groups; they do not establish which narrow focus strategy participants generally preferred.

Additionally, the actor contrast may also have been influenced by structural ordering preferences. Actor ay-INV places the actor before the verb and patient, producing an actor-initial

surface order. The studies reviewed in Chapter 2 suggests that Tagalog word order preferences may be influenced by tendencies favouring earlier placement of the agent or actor (Segalowitz & Galang, 1978; Garcia et al., 2018; Bondoc & Schafer, 2023). Although these studies did not directly investigate actor *ay-inv*, they make it plausible that the earlier placement of the actor may be favoured for reasons that are not entirely attributable to discourse status.

Predicate-initial actor VOS also remained acceptable across the discourse conditions and did not show a consistent broad focus advantage across all groups. This result is in line with descriptions of predicate-initial order as a basic Tagalog clause structure (Schachter & Reid, 2018). The actor conditions did not produce a simple contrast in which VOS was limited to broad focus and *ay-INV* to topic contexts. Both constructions were treated as possible responses across multiple discourse conditions. The overlap may have reduced the strength of the contrast between them.

For the Canada-based groups, actor *ay-INV* additionally produces an actor-verb-patient surface sequence resembling the canonical SVO word order of English. This similarity raises the possibility that experience with English contributed to its acceptability. However, the actor *ay-INV* was not consistently rated more highly than actor VOS among the Canada-based groups, so the results do not indicate a general preference for the English-like word order. The present findings also do not establish English influence as the cause of the pattern. Actor *ay-INV* was rated positively by the PH-NS group as well, and the group-level language background measures did not show a straightforward relationship between greater English orientation and higher ratings of the construction, as discussed in later sections. Its similarity to English SVO should only be treated as one possible contributing factor, as opposed to a direct explanation of the actor results.

6.1.2 Patient constructions

The clearest evidence of a discourse-conditioned word order preference was observed in the patient conditions for PH-NS, which served as a baseline comparison for the Canada-based groups. Patient VOS was expected to remain acceptable across the three discourse conditions because predicate-initial order is a basic Tagalog clause structure. In contrast, patient *ay-INV* was predicted to receive its strongest ratings when the patient preceding *ay* corresponded to the discourse topic established by the prompt.

The PH-NS group rated patient VOS more highly than patient *ay-INV* in broad and narrow focus contexts. However, when the patient was established as the discourse topic, the relative preference reversed: patient *ay-INV* was rated more highly than patient VOS. The significance of this result is in the change of the preferred construction across discourse contexts since predicate-initial VOS was favoured when the prompt did not establish the patient as the discourse topic. Then, the patient fronted *ay-INV* became more felicitous when the discourse was organized around the patient.

This contrast provides the clearest test of Tagalog word order being discourse sensitive. Unlike actor *ay-inv*, patient *ay-INV* places the patient before the verb and actor. Its increased felicity in the topic condition cannot be easily explained through a general preference for earlier placement of the actor or a similarity to English SVO order. The PH-NS reversal consequently provides the strongest evidence in the study that participants' felicity judgements reflected the relationship between discourse context and the status of the fronted constituent. Although, patient *ay-INV* was not completely rejected in broad or narrow focus contexts, which is consistent with Nuhn's (2023) account of *ay-INV* as associated with topicality without being restricted to

topic contexts. The four Canada-based groups did not show the same reversal in construction preference. In every Canada-based group, patient VOS remained more highly rated than patient ay-INV across all discourse contexts. However, this does not entail complete lack of discourse sensitivity because the CA-AI and CA-ADOL groups gave patient ay-INV its highest mean in topic condition. For CA-AI group, patient ay-INV increased from broad to narrow focus, and topic, and the difference between VOS and ay-INV was smallest in the topic condition. These patterns imply some topic sensitivity to the patient's discourse status, but the increase was not sufficient to produce change in construction preference found in the PH-NS group.

The CA-HS and CA-EI showed a different configuration. For CA-HS, the difference between patient VOS and patient ay-INV was smaller in the topic condition than in the broad focus, but ay-INV received its highest rating in narrow focus. The CA-EI group diverged further from the PH-NS pattern because patient VOS received its highest rating in the topic condition and patient ay-INV remained comparatively low. The contrast between CA-HS, CA-EI, CA-ADOL, and CA-AI groups reinforces that Canada-based participants did not form one uniform continuum of performance. One possible explanation of the continued preference for patient VOS is that it satisfies structural ordering tendencies discussed in previous research. In patient VOS, the post-verbal actor occurs before the patient pivot, allowing agent first and pivot second tendencies to align (Garcia et al., 2018; Bondoc & Schafer, 2023). The consistently high ratings of patient VOS among the Canada-based groups may reflect the strength of a structurally supported ordering preference that was not outweighed by the discourse topic manipulation. Overall, the Canada-based groups did not display the same degree of discourse-conditioned differentiation as the PH-NS group. Their results are best understood as showing more limited and gradient discourse-conditioned differentiation, rather than a complete absence of their discourse sensitivity.

6.2 Speaker group differences, age of arrival (AOA), and developmental history

The second research question compared sensitivity to discourse-conditioned Tagalog word order across speaker groups differing in age of onset of bilingualism and age of arrival. Chapter 3 predicted that the CA-AI group would pattern most closely with the PH-NS group because its members had acquired and used Tagalog for the longest period before immigration. The CA-ADOL group was also expected to follow closely with the PH-NS baseline than the CA-EI and CA-HS groups.

The results provided only partial support for these predictions. As discussed in *Section 6.1*, the PH-NS group had the most obvious discourse-conditioned differentiation in the patient conditions. None of the Canada-based speaker groups reproduced the PH-NS reversal between patient VOS and ay-inv. More importantly, the Canada-based groups did not form a direct progression according to age of arrival. The CA-AI and CA-ADOL groups rated patient ay-INV more highly in the topic condition than in broad focus, though, patient ay-INV remained less acceptable than patient VOS within the topic condition for both groups. The CA-HS and CA-EI groups exhibited another pattern that provide evidence for a consistent relationship between earlier bilingualism and sensitivity to the patient-topic contrast.

6.2.1 Non-linear patterns of Age of Arrival

The predicted group ordering assumed that a longer period of Tagalog development before migration might be associated with more baseline-like discourse sensitivity. As established in *Section 6.1*, these findings did not fully follow this ordering consistently. Some later-arriving

groups exhibited partial topic-related differentiation, none reproduced the PH-NS preference, and the earlier bilingual groups did not pattern evenly. These findings do not support a direct relationship where later arrival corresponds to more baseline-like discourse sensitivity. However, this does not mean age of arrival (AOA) was irrelevant. AOA provides an approximate indication of how much Tagalog development had already occurred before sustained immersion in an English-dominant environment. Later-arriving speakers may have had more time to develop grammatical and discourse knowledge in Tagalog before migration. However, AOA does not independently capture the amount of Tagalog exposure and use that continued afterward, nor does it necessarily correspond directly to participants' later proficiency or language dominance. The present findings indicate that this advantage did not lead uniformly to the PH-NS pattern.

6.2.2 Limitations of AOA

Age of arrival is only one part of representing participants' full developmental or linguistic histories. Speakers who arrive in Canada at similar ages may subsequently have various amounts of Tagalog they continued to hear and use, language practices with their families, and their schooling, and relative proficiency. This interpretation validates Kaltsa et al. (2015), whose findings displayed that age of onset was insufficient to explain bilingual performance on a discourse conditioned property. Similarly, Montrul's (2016) distinction among age of acquisition, proficiency and language dominance further aligns with this interpretation. Although a longer period of Tagalog development before migration may provide a stronger foundation in the language, later outcomes also depend on factors like cumulative exposure, active use, and contexts where the heritage language remains available. This pattern infers with research showing that bilingual performance at the syntax-discourse interface may depend on the specific construction and discourse relation being tested. Much like studies by Laleko (2022) and Laleko and Polinsky (2016), who argue that bilingual performance differs according to the type of topic relation and discourse-tracking demands, and sensitivity to sentence types and word order varied across sentence types and proficiency levels.

The second research question is addressed by the finding that the speaker groups diverged in their judgements and did not display a linear relationship according to age of onset of bilingualism or age of arrival. Even though later arrival may have allowed more time for Tagalog development and exposure before migration, it did not guarantee similar PH-NS group judgement patterns. The group differences may be best understood in relation to language development histories, as examined through the language background measures in *Section 6.3*.

6.3 Language experience, family practices, and self-rated proficiency

The third research question asked whether participants' judgements of discourse-conditioned Tagalog word order were related to measures of language experiences. Because the speaker groups were small and unequal in size, the questionnaire and FJT findings were compared descriptively. The analysis cannot establish direct relationships between individual language background variables and FJT performance. The questionnaire results are used to determine if the language profiles of the five groups correspond to the judgement patterns discussed in *Sections 6.1* and *6.2*.

6.3.1 Current language use

The current language use measures showed that external language was more English-oriented than family language use across all five groups. The PH-NS group reported the most Tagalog-oriented family and general language use. The CA-HS logged the most English-oriented family language use and together, with the CA-EI group, also had the highest external and general language use means. Among the Canada-based groups, the CA-AI reported the most Tagalog-oriented external use, with the CA-ADOL having relatively Tagalog-oriented family language use.

Some of these group-level language use patterns appeared to align with the differences in the FJT ratings. The PH-NS group reported the most Tagalog-oriented current language use and exhibited the strongest sensitivity to the discourse constraints governing the choice between patient VOS and patient ay-inv. Specifically, the PH-NS group rated patient VOS more highly in broad and narrow focus contexts, but when the patient was established as the discourse topic, patient ay-INV was rated more highly. This pattern is compatible with the possibility that more frequent day to day use of Tagalog is associated with stronger sensitivity to this discourse-conditioned word order contrast.

However, this relationship did not consistently extend across the Canada-based groups. Although the CA-AI and CA-ADOL groups logged relatively Tagalog-oriented use in specific domains, neither group reproduced the PH-HS baseline data. The absence of a straightforward relationship is consistent with Polinsky and Scontras' (2020) account of heritage language experience, which emphasizes that heritage speakers differ in the quantity and quality of input and in their access to contexts through which the heritage language remains available. However, our questions on current use of Tagalog vs. English captured how frequently Tagalog and English were used in several domains, though, not how much Tagalog was used in each interaction or what type of input they received.

The greater orientation towards English in external settings further suggests that Tagalog was not equally available across participants' daily contexts, which is consistent with research outlining that a heritage language may be maintained with parents and older relatives where the societal language becomes more dominant with siblings and in social contexts (Salvador et al., 2017; Morro & Russo, 2025). For the Canada-based participants, continued Tagalog use may have been concentrated in specific relationships and settings in which the language remained part of everyday communication.

6.3.2 Childhood and family language practices

The family language measures distinguished between the language participants heard during childhood, the language they used themselves, and their current language use with family members. These factors are important because exposure to Tagalog does not necessarily involve frequent active use. Participants may regularly hear Tagalog from family members while responding in English, resulting in different receptive and productive experiences. The CA-EI and CA-ADOL groups reported the most Tagalog-oriented childhood practices, yet neither exhibited the baseline patterns. Meanwhile, the CA-HS group reported hearing more Tagalog during childhood, than it being actively used, while most groups reported more English-oriented family use in the current period than during childhood. These results propose that substantial childhood Tagalog experience was not sufficient to account for the FJT patterns. For instance, early experience must be considered together with later opportunities to hear and use the language.

Montrul's (2013; 2023) account of cumulative heritage language experience underlines how early acquisition may provide for a foundation of grammatical knowledge, with no certainty that all properties will be maintained uniformly across the lifespan. Reduced input and use during childhood affect continued language development and reductions later in life can affect how previously established knowledge is accessed and used. The present group similarly implies the importance of examining specific family practices. Makarova et al. (2019) found that a broad parental belief in the importance of the heritage language was less informative than particular practices that created opportunities for their children to respond, read, listen, and participate in the language. Though family language measure in the present study describes participants' reported experiences and cannot establish if these practices directly produced the FJT patterns.

The difference between childhood input and active use in the CA-HS group is also compatible with research showing that language choice may vary across family relationships. Salvador et al. (2017) and Moro and Russo (2025) support examining heritage language maintenance through the amount of active use available across relationships and stages of life beyond childhood input isolation. Additionally, the family language measures did not establish whether the Tagalog input available in Canada contained the same discourse-conditioned word order patterns observed in the PH-NS group. This distinction remains equally important because heritage speakers might receive much of their input from first-generation immigrants whose own linguistic patterns may have been affected by prolonged language contact or attrition. This possibility is further discussed in *Section 6.3.4*.

6.3.3 Self-rated Tagalog proficiency

The self-rated proficiency results reported that the CA-ADOL group had the highest speaking and understanding ratings. The CA-HS group answered the lowest speaking rate and the largest difference between speaking and understanding. The CA-EI group rated understanding somewhat more highly than speaking. Lastly, the PH-NS and CA-AI groups measured relatively high ratings for both areas. These patterns also did not correspond with the FJT findings. Despite reporting the highest proficiency, the CA-ADOL group did not reproduce the PH-NS results, much like the CA-AI reporting high proficiency and exhibiting some increase in topic-relation, but patient VOS remained on top. General self-rated proficiency helped describe the groups' general Tagalog abilities, but it also did not predict sensitivity to discourse-conditioned contrast tested in the FJT.

Montrul's (2016) distinction between proficiency and language dominance helps explain this pattern, such that self-rated speaking and understanding characterize participants' perceptions of their general Tagalog abilities. However, they do not directly measure the distribution of Tagalog and English across their lives or their specific knowledge of a specific syntax-discourse relationship done by the FJT. A speaker may consider themselves highly proficient and differ from another group in the relative felicity assigned to the word orders we have interest in. The results are also consistent with Laleko's (2022) finding that proficiency may interact with the sentence type and discourse condition. Similarly, Ionin et al. (2023) likewise found that proficiency itself did not explain the differences between heritage speakers and L2 speakers in discourse-conditioned Russian word order. These studies support how proficiency can contribute to performance, with its relevance varying across constructions and speaker groups. Overall, self-rated proficiency helped characterize the participants' general abilities. The findings suggest that sensitivity to discourse-conditioned word order cannot be inferred from isolated speaking and understanding ratings.

6.3.4 *Synthesis of language background measures*

The questionnaire findings did not reveal a consistent relationship between any single measure of language experience and the FJT patterns. The PH-NS group combined a Tagalog-oriented profile with the clearest patient-topic differentiation, in which the Canada-based groups did not follow a consistent continuum. These results are consistent with the accounts developed in Chapter 2 that heritage and bilingual language outcomes are shaped by the combined interaction of early input, active use, continued exposure, proficiency, dominance, and developmental history (Polinsky & Scontras, 2020; Montrul, 2016, 2023). The language background measures helped contextualize differences among the speaker groups, even though no single measure independently explained their sensitivity to discourse-conditioned word order.

An additional consideration concerns the nature of the Tagalog input available to heritage speakers in Canada. The CA-AI group did not follow the PH-NS preference, despite having acquired and used Tagalog before immigrating as adults. This pattern may be attributed to first-language attrition or contact-induced change due to prolonged exposure in an English-dominant environment. However, since the present study did not examine change within the same individuals overtime, the findings cannot establish attrition conclusively. This interpretation is consistent with Bayram et al.'s (2019) account of attrition and intergenerational input as the CA-AI results raise the possibility that heritage speakers in Canada may receive input where sensitivity to the contrast between patient VOS and *ay*-INV is already reduced.

This possibility complicates the overall interpretation of the language background measures, as it is difficult to determine if the CA-HS pattern resulted from their own age of acquisition, current language use, proficiency, or family language practices when their source of Tagalog input may themselves differ from the PH-NS group. The findings therefore highlight the importance of including both heritage speakers and first-generation immigrants in research on heritage language acquisition, since possible attrition or contact-induced change among adult immigrants may shape the grammatical patterns available to the next generation.

6.4 *Production task*

The production task provided insights on the constructions that participants selected when producing their own responses to the broad focus, narrow focus, and topic prompts. Across the five speaker groups, participants produced predicate-initial VOS and VSO structures, actor *ay*-inversion, some patient *ay*-inversion, reversed-ang, ang-inversion and responses classified as Other.

In the broad focus condition, the PH-NS entirely relied on predicate-initial constructions, in comparison to the Canada-based groups who produced a wider range of structures. These include, VOS, VSO, actor *ay*-INV, and Other responses. The occurrence of actor *ay*-INV in the broad focus contexts is consistent with the FJT finding that the construction was not restricted to contexts in which the actor had been established as the discourse topic.

In the narrow focus condition, REV-ang was frequent in the CA-AI and CA-HS groups with actor *ay*-INV occurring most in the CA-ADOL group. The use of a variety of structures is consistent with the view that narrow focus in Tagalog may be expressed through multiple grammatical strategies.

Finally, actor *ay-INV* occurred frequently in several Canada-based groups in the topic conditions, although there was no uniform increase in *ay-INV* across all groups. This allows us to make the conclusion that the production task did not reveal a single construction that was consistently selected whenever a discourse topic had been established. Participants employed several word order and information-structural strategies when formulating their own sentences.

The responses classified as Other did not display a consistent English-like SVO pattern. A possible link to English was the relatively frequent use of actor *ay-INV* among several Canada-based groups, including the CA-AI group. Because actor *ay-INV* places the actor before the verb and patient, it produces a surface SVO order compatible with English. Its frequent occurrence across the three discourse conditions suggests that some Canada-based speakers did not strongly associate actor *ay-INV* with contexts in which the fronted actor had been established as the discourse topic. However, this inversion is independently grammatical in Tagalog, so its use cannot be treated as direct evidence of English transfer.

The CA-AI production pattern also supports the discussion of intergenerational input in *Section 6.3.4*. The group's use of actor *ay-INV* across discourse conditions suggests that the association between *ay-INV* and topicality may be less strongly maintained among some first-generation immigrants. The CA-HS pattern may partly reflect the Tagalog grammar available in the input provided by this generation.

The PH-NS participant did not produce *ay-INV* in any discourse condition. This finding must be interpreted cautiously as the production results were only based on one participant. More broadly, these results cannot be generalized as representative preferences of the five speaker populations because of the unequal number of participants who completed each task. They provide an exploratory account of the range of constructions participants used in their spontaneous productions and their contextual judgements.

Chapter 7: Closing Remarks

7.1 Conclusion

The present study examined how Philippines-based speakers and Canada-based Tagalog speakers judged and produced predicate-initial and *ay*-inverted constructions across broad focus, narrow focus, and topic contexts. It also considered whether differences among speaker groups could be understood in relation to age of arrival and participants' language experiences.

The findings showed that the relationship between discourse context and Tagalog word order is not uniform across constructions and speaker groups. Actor *ay-INV* remained relatively acceptable across conditions. The only clearest discourse-conditioned contrast appeared in the PH-NS patient constructions: patient VOS received the highest ratings in broad and narrow focus contexts, whereas patient *ay-INV* received higher ratings when the patient was the discourse topic. The Canada-based groups did not reproduce this reversal. Furthermore, the group patterns did not form a simple progression according to age of arrival. A longer period of Tagalog development before immigration did not guarantee closer patterning with the PH-NS baseline group, much like early bilingualism outcomes. Language use, family practices, childhood exposure, and self-rated proficiency helped characterize participants' varying linguistic experiences, although no individual measure sufficiently explained the observed patterns. These findings contribute to research on heritage and bilingual grammar by establishing that variation

in discourse-conditioned knowledge reflects speakers' diverse developmental and multilingual experiences that cannot be attributed to any single demographic factor.

The FJT and production task provided complementary evidence about participants' knowledge and use of Tagalog word order. The FJT examined which constructions participants judged to be felicitous across discourse contexts, whereas the production task showed which constructions they selected when formulating their own responses. The production task also revealed a wider range of structures, confirming the previous descriptions of multiple strategies available for the narrow focus condition: REV-ang and ang-INV responses, as well as some irregular responses that may reflect the greater processing demands of spontaneous production. Additionally, the production data did not show a consistent pattern of English-like influence errors.

The findings show that Tagalog allows speakers to describe the same event through several grammatical word orders. However, these options are not simply interchangeable as their use and interpretation depend on the interaction of discourse context, voice, fronted constituent and speakers' language histories. The CA-AI results suggest that discourse conditioning may already be weakened among some first-generation immigrants. The CA-HS pattern may partly reflect the input provided by this generation. Altogether, these results show that the relationship between the sentence structure and discourse remains flexible and shaped by changing experiences of acquiring and using Tagalog. Tagalog word order provides an important view into how grammar and discourse interact with homeland and diaspora communities.

7.2 Limitations

The findings of the present study must be interpreted in consideration of several limitations.

7.2.1 Unequal speaker groups

The first limitation concerns the small and unequal speaker groups. Although 32 participants contributed to the FJT and questionnaire data, some groups remained small, especially the PH-NS group. The group means could have been influenced by individual participants and cannot be generalized to the broader populations represented by each group.

Only 15 participants contributed usable production data, making the production task the most limited component of the study. Some participants did not complete the production task, while other responses could not be analyzed because the recordings were either missing, corrupted, incomplete, or unintelligible. Since the production task relied on a beta feature of Gorilla's audio recording function, recording quality and compatibility varied across devices and browsers. Most issues were common on phones, Safari, and iOS devices. Mobile phones may have been the most accessible device for many people, but having reliable recording was not consistently possible through these devices. Furthermore, because participants completed the study remotely, the researcher could not control microphone quality, background noise, internet stability, or the environment the recordings were made, despite providing explicit instructions.

7.2.2 Recruitment and accessibility

Recruiting Philippines-based native speakers was especially challenging because the study was conducted remotely from Canada. The recruitment process depended mostly on the researcher's personal and extended networks, which limited the number and range of potential

participants who could be reached. Some individuals who were contacted also did not understand the significance of the study, which could have contributed to the reduced participation.

Having access to suitable technology created an additional barrier because participants required a compatible device and a sufficiently stable internet connection to complete the Gorilla experiment. Some potential participants, specifically those residing in provincial areas of the Philippines did not have access to a laptop or tablet or reliable internet service. These technological requirements of the experiment may have excluded possible eligible participants and contributed to the small PH-NS sample.

7.2.3 Production prompts

Some of the production responses also suggested that participants were not consistently attending to the specific discourse prompt. In some trials, participants appeared to describe what was happening in the image, as though they were answering the general broad focus question, rather than responding to a narrow focus or topic prompt. This may have weakened the intended distinction between the discourse conditions. Because the study was completed independently, the researcher could not clarify the instructions or redirect the participants during the task.

7.2.4 Self-reported background measures

The language background questionnaire relied on participants' self-reported language use, practices and proficiency. These ratings helped the study characterize differences among the speaker groups but could not provide precise measures of the quantity or quality of Tagalog input participants received. Self-rated proficiency may also deviate according to the participants' individual standards and perception of their own abilities. The questionnaire only helped with contextualizing the experimental findings but could not establish direct causal relationships between their language experience and performance.

Another consideration is that many participants reported speaking or understanding at least one additional Philippine language. This experience was documented in the questionnaire, although it was not examined as a separate variable in the analysis. It is unclear whether knowledge and use of other Philippine languages may have influenced participants' Tagalog word order judgements or productions. Different Philippine languages may vary in their word order patterns, information structural systems, and the context which they are being used along with Tagalog. The participants' results should be understood within a multilingual perspective.

7.3 Directions for future research

Future research for this project should recruit a larger and balanced participant sample across all five speaker groups. Specifically, expanding the Philippines-based native speaker group is necessary to provide a more reliable baseline for comparison. Increasing the number of participants in the production task would also make it possible to examine robust group-level patterns and reduce the influence of individual responses on the findings. Having a larger and more balanced sample would also allow for inferential statistical testing to determine whether the observed differences across discourse conditions and speaker groups are statistically reliable.

Other recruitment strategies should also be considered by establishing formal collaborations with universities and researchers in the Philippines to support recruitment and provide access to a larger and more diverse participant pool. These collaborations may also help in-person data collection feasible for individuals with limited access to devices or internet connections. Another

direction for this project is considering including additional recruitment materials that could explain the significance of the field more directly.

Additionally, finding an alternative platform that has a more stable audio recording feature is crucial, in addition to ensuring that the task is compatible with a wider range of devices. Participants should also be explicitly instructed to complete the task in a quiet location. Another option would be to conduct the production task in a supervised setting. The FJT and questionnaire could remain online, and the production component could be completed through a supervised online or in-person session. This would allow the researcher to confirm that the participants understood the discourse prompts, monitor the recording quality, and clarify the instructions when needed.

Finally, considering examining the participants multilingual experience directly would also be beneficial in interpreting the results of each task since many participants reported speaking or understanding other Philippine languages. Participants could then be compared according to their background to determine whether knowledge of other Philippine languages is associated with differences in Tagalog word order judgements or production.

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Appendix

Appendix 1. FJT Stimulus (Set A, B, and C)

Set A.

Trial	Set	Condition	WordOrder	Prompt	Stimulus	Instruction
1	1-subject	Broad	VOS	Anong nangyari sa kusina?	Kumain ng saging ang lalaki	Gaano ka-natural ang pangungusap bilang sagot sa sitwasyon?
2	1-subject	Narrow	Ay	Eh yung saging, sino ang kumain?	Ang lalaki ay kumain ng saging.	Gaano ka-natural ang pangungusap bilang sagot sa sitwasyon?
3	1-object	Narrow	VOS	Eh yung lalaki, ano ang kinain niya?	Kumain ng saging ang lalaki	Gaano ka-natural ang pangungusap bilang sagot sa sitwasyon?
4	1-object	Topic	Ay	Eh yung saging, sino ang kumain?	Ang saging ay kinain ng lalaki.	Gaano ka-natural ang pangungusap bilang sagot sa sitwasyon?
5	2-subject	Narrow	VOS	Eh yung tubig, sino ang uminom?	Uminom ng tubig ang babae.	Gaano ka-natural ang pangungusap bilang sagot sa sitwasyon?
6	2-subject	Topic	Ay	Eh yung babae, ano ang ininom niya?	Ang babae ay uminom ng tubig.	Gaano ka-natural ang pangungusap bilang sagot sa sitwasyon?
7	2-object	Topic	VOS	Eh yung tubig, sino ang uminom?	Uminom ng tubig ang babae.	Gaano ka-natural ang pangungusap bilang sagot sa sitwasyon?
8	2-object	Broad	Ay	Anong nangyari sa kusina?	Ang tubig ay ininom ng babae.	Gaano ka-natural ang pangungusap bilang sagot sa sitwasyon?
9	3-subject	Topic	VOS	Eh yung estudyante, ano ang sinulat niya?	Sumulat ng liham ang estudyante.	Gaano ka-natural ang pangungusap bilang sagot sa sitwasyon?
10	3-subject	Broad	Ay	Anong nangyari sa bahay?	Ang estudyante ay sumulat ng liham.	Gaano ka-natural ang pangungusap bilang sagot sa sitwasyon?
11	3-object	Broad	VOS	Anong nangyari sa bahay?	Sumulat ng liham ang estudyante.	Gaano ka-natural ang pangungusap bilang sagot sa sitwasyon?
12	3-object	Narrow	Ay	Eh yung estudyante, ano ang sinulat niya?	Ang liham ay sinulat ng estudyante.	Gaano ka-natural ang pangungusap bilang sagot sa sitwasyon?
13	4-subject	Broad	VOS	Anong nangyari sa kwarto?	Kumuha ng damit ang estudyante.	Gaano ka-natural ang pangungusap bilang sagot sa sitwasyon?
14	4-subject	Narrow	Ay	Eh yung damit, sino ang kumuha?	Ang estudyante ay kumuha ng damit.	Gaano ka-natural ang pangungusap bilang sagot sa sitwasyon?
15	4-object	Narrow	VOS	Eh yung estudyante, ano ang kinuha niya?	Kumuha ng damit ang estudyante.	Gaano ka-natural ang pangungusap bilang sagot sa sitwasyon?
16	4-object	Topic	Ay	Eh yung damit, sino ang kumuha?	Ang damit ay kinuha ng estudyante.	Gaano ka-natural ang pangungusap bilang sagot sa sitwasyon?
17	5-subject	Narrow	VOS	Eh yung prutas, sino ang pumitas?	Pumitas ng prutas ang babae.	Gaano ka-natural ang pangungusap bilang sagot sa sitwasyon?
18	5-subject	Topic	Ay	Eh yung babae, ano ang pinitas niya?	Ang babae ay pumitas ng prutas.	Gaano ka-natural ang pangungusap bilang sagot sa sitwasyon?
19	5-object	Topic	VOS	Eh yung prutas, sino ang pumitas?	Pumitas ng prutas ang babae.	Gaano ka-natural ang pangungusap bilang sagot sa sitwasyon?
20	5-object	Broad	Ay	Anong nangyari sa bukid?	Ang prutas ay pinitas ng babae.	Gaano ka-natural ang pangungusap bilang sagot sa sitwasyon?
21	6-subject	Topic	VOS	Eh yung lalaki, ano ang sinipa niya?	Sumipa ng bola ang lalaki.	Gaano ka-natural ang pangungusap bilang sagot sa sitwasyon?
22	6-subject	Broad	Ay	Anong nangyari sa labas?	Ang lalaki ay sumipa ng bola.	Gaano ka-natural ang pangungusap bilang sagot sa sitwasyon?
23	6-object	Broad	VOS	Anong nangyari sa labas?	Sumipa ng bola ang lalaki.	Gaano ka-natural ang pangungusap bilang sagot sa sitwasyon?
24	6-object	Narrow	Ay	Eh yung lalaki, ano ang sinipa niya?	Ang bola ay sinipa ng lalaki.	Gaano ka-natural ang pangungusap bilang sagot sa sitwasyon?
25	7-subject	Broad	VOS	Anong nangyari sa tindahan?	Bumili ng manika ang bata.	Gaano ka-natural ang pangungusap bilang sagot sa sitwasyon?
26	7-subject	Narrow	Ay	Eh yung manika, sino ang bumili?	Ang bata ay bumili ng manika.	Gaano ka-natural ang pangungusap bilang sagot sa sitwasyon?
27	7-object	Narrow	VOS	Eh yung bata, ano ang binili niya?	Bumili ng manika ang bata.	Gaano ka-natural ang pangungusap bilang sagot sa sitwasyon?
28	7-object	Topic	Ay	Eh yung manika, sino ang bumili?	Ang manika ay binili ng bata.	Gaano ka-natural ang pangungusap bilang sagot sa sitwasyon?
29	8-subject	Narrow	VOS	Eh yung kakanin, sino ang gumawa?	Gumawa ng kakanin ang babae.	Gaano ka-natural ang pangungusap bilang sagot sa sitwasyon?
30	8-subject	Topic	Ay	Eh yung babae, ano ang ginawa niya?	Ang babae ay gumawa ng kakanin.	Gaano ka-natural ang pangungusap bilang sagot sa sitwasyon?
31	8-object	Topic	VOS	Eh yung kakanin, sino ang gumawa?	Gumawa ng kakanin ang babae.	Gaano ka-natural ang pangungusap bilang sagot sa sitwasyon?
32	8-object	Broad	Ay	Anong nangyari sa kusina?	Ang kakanin ay ginawa ng babae.	Gaano ka-natural ang pangungusap bilang sagot sa sitwasyon?
33	9-subject	Topic	VOS	Eh yung babae, ano ang tinawag niya?	Tumawag ng traysikel ang babae.	Gaano ka-natural ang pangungusap bilang sagot sa sitwasyon?
34	9-subject	Broad	Ay	Anong nangyari sa kalsada?	Ang babae ay tumawag ng traysikel.	Gaano ka-natural ang pangungusap bilang sagot sa sitwasyon?
35	9-object	Broad	VOS	Anong nangyari sa kalsada?	Tumawag ng traysikel ang babae.	Gaano ka-natural ang pangungusap bilang sagot sa sitwasyon?
36	9-object	Narrow	Ay	Eh yung babae, ano ang tinawag niya?	Ang traysikel ay tinawag ng babae.	Gaano ka-natural ang pangungusap bilang sagot sa sitwasyon?
37	10-subject	Broad	VOS	Anong nangyari sa bahay?	Nagdala ng bulaklak ang lalaki.	Gaano ka-natural ang pangungusap bilang sagot sa sitwasyon?
38	10-subject	Narrow	Ay	Eh yung bulaklak, sino ang nagdala?	Ang lalaki ay nagdala ng bulaklak.	Gaano ka-natural ang pangungusap bilang sagot sa sitwasyon?
39	10-object	Narrow	VOS	Eh yung lalaki, ano ang dinala niya?	Nagdala ng bulaklak ang lalaki.	Gaano ka-natural ang pangungusap bilang sagot sa sitwasyon?
40	10-object	Topic	Ay	Eh yung bulaklak, sino ang nagdala?	Ang bulaklak ay dinala ng lalaki.	Gaano ka-natural ang pangungusap bilang sagot sa sitwasyon?

Set B.

Trial	Set	Condition	WordOrder	Prompt	Stimulus	Instruction
1	1-subject	Narrow	VOS	Eh yung saging, sino ang kumain?	Kumain ng saging ang lalaki	Gaano ka-natural ang pangungusap bilang sagot sa sitwasyon?
2	1-subject	Topic	Ay	Eh yung lalaki, ano ang kinain niya?	Ang lalaki ay kumain ng saging.	Gaano ka-natural ang pangungusap bilang sagot sa sitwasyon?
3	1-object	Topic	VOS	Eh yung saging, sino ang kumain?	Kumain ng saging ang lalaki	Gaano ka-natural ang pangungusap bilang sagot sa sitwasyon?
4	1-object	Broad	Ay	Anong nangyari sa kusina?	Ang saging ay kinain ng lalaki.	Gaano ka-natural ang pangungusap bilang sagot sa sitwasyon?
5	2-subject	Topic	VOS	Eh yung babae, ano ang ininom niya?	Uminom ng tubig ang babae.	Gaano ka-natural ang pangungusap bilang sagot sa sitwasyon?
6	2-subject	Broad	Ay	Anong nangyari sa kusina?	Ang babae ay uminom ng tubig.	Gaano ka-natural ang pangungusap bilang sagot sa sitwasyon?
7	2-object	Broad	VOS	Anong nangyari sa kusina?	Uminom ng tubig ang babae.	Gaano ka-natural ang pangungusap bilang sagot sa sitwasyon?
8	2-object	Narrow	Ay	Eh yung babae, ano ang ininom niya?	Ang tubig ay ininom ng babae.	Gaano ka-natural ang pangungusap bilang sagot sa sitwasyon?
9	3-subject	Broad	VOS	Anong nangyari sa bahay?	Sumulat ng liham ang estudyante.	Gaano ka-natural ang pangungusap bilang sagot sa sitwasyon?
10	3-subject	Narrow	Ay	Eh yung liham, sino ang sumulat?	Ang estudyante ay sumulat ng liham.	Gaano ka-natural ang pangungusap bilang sagot sa sitwasyon?
11	3-object	Narrow	VOS	Eh yung estudyante, ano ang sinulat niya?	Sumulat ng liham ang estudyante.	Gaano ka-natural ang pangungusap bilang sagot sa sitwasyon?
12	3-object	Topic	Ay	Eh yung liham, sino ang sumulat?	Ang liham ay sinulat ng estudyante.	Gaano ka-natural ang pangungusap bilang sagot sa sitwasyon?
13	4-subject	Narrow	VOS	Eh yung damit, sino ang kumuha?	Kumuha ng damit ang estudyante.	Gaano ka-natural ang pangungusap bilang sagot sa sitwasyon?
14	4-subject	Topic	Ay	Eh yung estudyante, ano ang kinuha niya?	Ang estudyante ay kumuha ng damit.	Gaano ka-natural ang pangungusap bilang sagot sa sitwasyon?
15	4-object	Topic	VOS	Eh yung damit, sino ang kumuha?	Kumuha ng damit ang estudyante.	Gaano ka-natural ang pangungusap bilang sagot sa sitwasyon?
16	4-object	Broad	Ay	Anong nangyari sa kwarto?	Ang damit ay kinuha ng estudyante.	Gaano ka-natural ang pangungusap bilang sagot sa sitwasyon?
17	5-subject	Topic	VOS	Eh yung babae, ano ang pinitas niya?	Pumitas ng prutas ang babae.	Gaano ka-natural ang pangungusap bilang sagot sa sitwasyon?
18	5-subject	Broad	Ay	Anong nangyari sa bukid?	Ang babae ay pumitas ng prutas.	Gaano ka-natural ang pangungusap bilang sagot sa sitwasyon?
19	5-object	Broad	VOS	Anong nangyari sa bukid?	Pumitas ng prutas ang babae.	Gaano ka-natural ang pangungusap bilang sagot sa sitwasyon?
20	5-object	Narrow	Ay	Eh yung babae, ano ang pinitas niya?	Ang prutas ay pinitas ng babae.	Gaano ka-natural ang pangungusap bilang sagot sa sitwasyon?
21	6-subject	Broad	VOS	Anong nangyari sa labas?	Sumipa ng bola ang lalaki.	Gaano ka-natural ang pangungusap bilang sagot sa sitwasyon?
22	6-subject	Narrow	Ay	Eh yung bola, sino ang sumipa?	Ang lalaki ay sumipa ng bola.	Gaano ka-natural ang pangungusap bilang sagot sa sitwasyon?
23	6-object	Narrow	VOS	Eh yung lalaki, ano ang sinipa niya?	Sumipa ng bola ang lalaki.	Gaano ka-natural ang pangungusap bilang sagot sa sitwasyon?
24	6-object	Topic	Ay	Eh yung bola, sino ang sumipa?	Ang bola ay sinipa ng lalaki.	Gaano ka-natural ang pangungusap bilang sagot sa sitwasyon?
25	7-subject	Narrow	VOS	Eh yung manika, sino ang bumili?	Bumili ng manika ang bata.	Gaano ka-natural ang pangungusap bilang sagot sa sitwasyon?
26	7-subject	Topic	Ay	Eh yung bata, ano ang binili niya?	Ang bata ay bumili ng manika.	Gaano ka-natural ang pangungusap bilang sagot sa sitwasyon?
27	7-object	Topic	VOS	Eh yung manika, sino ang bumili?	Bumili ng manika ang bata.	Gaano ka-natural ang pangungusap bilang sagot sa sitwasyon?
28	7-object	Broad	Ay	Anong nangyari sa tindahan?	Ang manika ay binili ng bata.	Gaano ka-natural ang pangungusap bilang sagot sa sitwasyon?
29	8-subject	Topic	VOS	Eh yung babae, ano ang ginawa niya?	Gumawa ng kakanin ang babae.	Gaano ka-natural ang pangungusap bilang sagot sa sitwasyon?
30	8-subject	Broad	Ay	Anong nangyari sa kusina?	Ang babae ay gumawa ng kakanin.	Gaano ka-natural ang pangungusap bilang sagot sa sitwasyon?
31	8-object	Broad	VOS	Anong nangyari sa kusina?	Gumawa ng kakanin ang babae.	Gaano ka-natural ang pangungusap bilang sagot sa sitwasyon?
32	8-object	Narrow	Ay	Eh yung babae, ano ang ginawa niya?	Ang kakanin ay ginawa ng babae.	Gaano ka-natural ang pangungusap bilang sagot sa sitwasyon?
33	9-subject	Broad	VOS	Anong nangyari sa kalsada?	Tumawag ng traysikel ang babae.	Gaano ka-natural ang pangungusap bilang sagot sa sitwasyon?
34	9-subject	Narrow	Ay	Eh yung traysikel, sino ang tumawag?	Ang babae ay tumawag ng traysikel.	Gaano ka-natural ang pangungusap bilang sagot sa sitwasyon?
35	9-object	Narrow	VOS	Eh yung babae, ano ang tinawag niya?	Tumawag ng traysikel ang babae.	Gaano ka-natural ang pangungusap bilang sagot sa sitwasyon?
36	9-object	Topic	Ay	Eh yung traysikel, sino ang tumawag?	Ang traysikel ay tinawag ng babae.	Gaano ka-natural ang pangungusap bilang sagot sa sitwasyon?
37	10-subject	Narrow	VOS	Eh yung bulaklak, sino ang nagdala?	Nagdala ng bulaklak ang lalaki.	Gaano ka-natural ang pangungusap bilang sagot sa sitwasyon?
38	10-subject	Topic	Ay	Eh yung lalaki, ano ang dinala niya?	Ang lalaki ay nagdala ng bulaklak.	Gaano ka-natural ang pangungusap bilang sagot sa sitwasyon?
39	10-object	Topic	VOS	Eh yung bulaklak, sino ang nagdala?	Nagdala ng bulaklak ang lalaki.	Gaano ka-natural ang pangungusap bilang sagot sa sitwasyon?
40	10-object	Broad	Ay	Anong nangyari sa bahay?	Ang bulaklak ay dinala ng lalaki.	Gaano ka-natural ang pangungusap bilang sagot sa sitwasyon?

Set C.

Trial	Set	Condition	WordOrder	Prompt	Stimulus	Instruction
1	1-subject	Topic	VOS	Eh yung lalaki, ano ang kinain niya?	Kumain ng saging ang lalaki	Gaano ka-natural ang pangungusap bilang sagot sa sitwasyon?
2	1-subject	Broad	Ay	Anong nangyari sa kusina?	Ang lalaki ay kumain ng saging.	Gaano ka-natural ang pangungusap bilang sagot sa sitwasyon?
3	1-object	Broad	VOS	Anong nangyari sa kusina?	Kumain ng saging ang lalaki.	Gaano ka-natural ang pangungusap bilang sagot sa sitwasyon?
4	1-object	Narrow	Ay	Eh yung lalaki, ano ang kinain niya?	Ang saging ay kinain ng lalaki.	Gaano ka-natural ang pangungusap bilang sagot sa sitwasyon?
5	2-subject	Broad	VOS	Anong nangyari sa kusina?	Uminom ng tubig ang babae.	Gaano ka-natural ang pangungusap bilang sagot sa sitwasyon?
6	2-subject	Narrow	Ay	Eh yung tubig, sino ang uminom?	Ang babae ay uminom ng tubig.	Gaano ka-natural ang pangungusap bilang sagot sa sitwasyon?
7	2-object	Narrow	VOS	Eh yung babae, ano ang ininom niya?	Uminom ng tubig ang babae.	Gaano ka-natural ang pangungusap bilang sagot sa sitwasyon?
8	2-object	Topic	Ay	Eh yung tubig, sino ang uminom?	Ang tubig ay ininom ng babae.	Gaano ka-natural ang pangungusap bilang sagot sa sitwasyon?
9	3-subject	Narrow	VOS	Eh yung liham, sino ang sumulat?	Sumulat ng liham ang estudyante.	Gaano ka-natural ang pangungusap bilang sagot sa sitwasyon?
10	3-subject	Topic	Ay	Eh yung estudyante, ano ang sinulat niya?	Ang estudyante ay sumulat ng liham.	Gaano ka-natural ang pangungusap bilang sagot sa sitwasyon?
11	3-object	Topic	VOS	Eh yung liham, sino ang sumulat?	Sumulat ng liham ang estudyante.	Gaano ka-natural ang pangungusap bilang sagot sa sitwasyon?
12	3-object	Broad	Ay	Anong nangyari sa bahay?	Ang liham ay sinulat ng estudyante.	Gaano ka-natural ang pangungusap bilang sagot sa sitwasyon?
13	4-subject	Topic	VOS	Eh yung estudyante, ano ang kinuha niya?	Kumuha ng damit ang estudyante.	Gaano ka-natural ang pangungusap bilang sagot sa sitwasyon?
14	4-subject	Broad	Ay	Anong nangyari sa kwarto?	Ang estudyante ay kumuha ng damit.	Gaano ka-natural ang pangungusap bilang sagot sa sitwasyon?
15	4-object	Broad	VOS	Anong nangyari sa kwarto?	Kumuha ng damit ang estudyante.	Gaano ka-natural ang pangungusap bilang sagot sa sitwasyon?
16	4-object	Narrow	Ay	Eh yung estudyante, ano ang kinuha niya?	Ang damit ay kinuha ng estudyante.	Gaano ka-natural ang pangungusap bilang sagot sa sitwasyon?
17	5-subject	Broad	VOS	Anong nangyari sa bukid?	Pumitas ng prutas ang babae.	Gaano ka-natural ang pangungusap bilang sagot sa sitwasyon?
18	5-subject	Narrow	Ay	Eh yung prutas, sino ang pumitas?	Ang babae ay pumitas ng prutas.	Gaano ka-natural ang pangungusap bilang sagot sa sitwasyon?
19	5-object	Narrow	VOS	Eh yung babae, ano ang pinitas niya?	Pumitas ng prutas ang babae.	Gaano ka-natural ang pangungusap bilang sagot sa sitwasyon?
20	5-object	Topic	Ay	Eh yung prutas, sino ang pumitas?	Ang prutas ay pinitas ng babae.	Gaano ka-natural ang pangungusap bilang sagot sa sitwasyon?
21	6-subject	Narrow	VOS	Eh yung bola, sino ang sumipa?	Sumipa ng bola ang lalaki.	Gaano ka-natural ang pangungusap bilang sagot sa sitwasyon?
22	6-subject	Topic	Ay	Eh yung lalaki, ano ang sinipa niya?	Ang lalaki ay sumipa ng bola.	Gaano ka-natural ang pangungusap bilang sagot sa sitwasyon?
23	6-object	Topic	VOS	Eh yung bola, sino ang sumipa?	Sumipa ng bola ang lalaki.	Gaano ka-natural ang pangungusap bilang sagot sa sitwasyon?
24	6-object	Broad	Ay	Anong nangyari sa labas?	Ang bola ay sinipa ng lalaki.	Gaano ka-natural ang pangungusap bilang sagot sa sitwasyon?
25	7-subject	Topic	VOS	Eh yung bata, ano ang binili niya?	Bumili ng manika ang bata.	Gaano ka-natural ang pangungusap bilang sagot sa sitwasyon?
26	7-subject	Broad	Ay	Anong nangyari sa tindahan?	Ang bata ay bumili ng manika.	Gaano ka-natural ang pangungusap bilang sagot sa sitwasyon?
27	7-object	Broad	VOS	Anong nangyari sa tindahan?	Bumili ng manika ang bata.	Gaano ka-natural ang pangungusap bilang sagot sa sitwasyon?
28	7-object	Narrow	Ay	Eh yung bata, ano ang binili niya?	Ang manika ay binili ng bata.	Gaano ka-natural ang pangungusap bilang sagot sa sitwasyon?
29	8-subject	Broad	VOS	Anong nangyari sa kusina?	Gumawa ng kakanin ang babae.	Gaano ka-natural ang pangungusap bilang sagot sa sitwasyon?
30	8-subject	Narrow	Ay	Eh yung kakanin, sino ang gumawa?	Ang babae ay gumawa ng kakanin.	Gaano ka-natural ang pangungusap bilang sagot sa sitwasyon?
31	8-object	Narrow	VOS	Eh yung babae, ano ang ginawa niya?	Gumawa ng kakanin ang babae.	Gaano ka-natural ang pangungusap bilang sagot sa sitwasyon?
32	8-object	Topic	Ay	Eh yung kakanin, sino ang gumawa?	Ang kakanin ay ginawa ng babae.	Gaano ka-natural ang pangungusap bilang sagot sa sitwasyon?
33	9-subject	Narrow	VOS	Eh yung traysikel, sino ang tumawag?	Tumawag ng traysikel ang babae.	Gaano ka-natural ang pangungusap bilang sagot sa sitwasyon?
34	9-subject	Topic	Ay	Eh yung babae, ano ang tinawag niya?	Ang babae ay tumawag ng traysikel.	Gaano ka-natural ang pangungusap bilang sagot sa sitwasyon?
35	9-object	Topic	VOS	Eh yung traysikel, sino ang tumawag?	Tumawag ng traysikel ang babae.	Gaano ka-natural ang pangungusap bilang sagot sa sitwasyon?
36	9-object	Broad	Ay	Anong nangyari sa kalsada?	Ang traysikel ay tinawag ng babae.	Gaano ka-natural ang pangungusap bilang sagot sa sitwasyon?
37	10-subject	Topic	VOS	Eh yung lalaki, ano ang dinala niya?	Nagdala ng bulaklak ang lalaki.	Gaano ka-natural ang pangungusap bilang sagot sa sitwasyon?
38	10-subject	Broad	Ay	Anong nangyari sa bahay?	Ang lalaki ay nagdala ng bulaklak.	Gaano ka-natural ang pangungusap bilang sagot sa sitwasyon?
39	10-object	Broad	VOS	Anong nangyari sa bahay?	Nagdala ng bulaklak ang lalaki.	Gaano ka-natural ang pangungusap bilang sagot sa sitwasyon?
40	10-object	Narrow	Ay	Eh yung lalaki, ano ang dinala niya?	Ang bulaklak ay dinala ng lalaki.	Gaano ka-natural ang pangungusap bilang sagot sa sitwasyon?

Appendix B. Language Background Questionnaire

Section 1: Background

Please answer the following questions about your background and language experience.

Age:

Country of Birth:

Current Country of Residence:

Have you ever lived in a country where English is the main language?

- ☐ Yes
☐ No

If **yes**, please specify which country/countries. If **no**, enter "N/A".

If **yes**, for how long did you live there? If **no**, enter "N/A".

At what age did you move to Canada? If you were born in Canada, or have never lived in Canada, enter "N/A".

At what age did you begin learning Tagalog? Approximation is accepted.

What language was primarily used in your early schooling?

What language was primarily used in your later schooling?

What other Philippine languages (dialects) do you speak? If none, enter "N/A".

Section 2: Language Use

How often do you use Tagalog and English in the following contexts?

[illegible]

Section 3: Family Language Practices

What language did you typically use in the following situations?

	1= Always Tagalog	2	3	4	5= Always English
Language family members spoke to you as a child	☐	☐	☐	☐	☐
Language you spoke to family members as a child	☐	☐	☐	☐	☐
Language you currently speak with your family	☐	☐	☐	☐	☐

Did your family encourage you to use Tagalog growing up?

Not at all	1	2	3	4	5	Very Strongly
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How comfortable do you feel speaking in Tagalog in everyday situations?

Not comfortable at all	1	2	3	4	5	Very comfortable
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Section 4: Proficiency

Please rate your current ability in Tagalog and English.

	1= Very low	2	3	4	5= Excellent
Tagalog (speaking)	☐	☐	☐	☐	☐
Tagalog (understanding)	☐	☐	☐	☐	☐
English (speaking)	☐	☐	☐	☐	☐
English (understanding)	☐	☐	☐	☐	☐

Appendix C. Production Stimulus (Set A, B, and C)

Set A.

Set	Condition	Prompt	Instruction	Image
1	Broad	Anong nangyari sa kusina?	Sagutin ang tanong gamit ang isang buong pangungusap.	(1) boy eating apple.png
2	Narrow	Sino ang uminom ng kape?	Sagutin ang tanong gamit ang isang buong pangungusap.	(2) girl drinking coffee.png
3	Topic	Eh yung babae, anong ginawa niya?	Sagutin ang tanong gamit ang isang buong pangungusap.	(3) girl wiping the table.png
4	Broad	Anong nangyari sa eskwela?	Sagutin ang tanong gamit ang isang buong pangungusap.	(4) girl doing homework.png
5	Narrow	Sino ang nagsara ng pinto?	Sagutin ang tanong gamit ang isang buong pangungusap.	(5) girl closing the door .png
6	Topic	Eh yung babae, anong ginawa niya?	Sagutin ang tanong gamit ang isang buong pangungusap.	(6) girl watching tv in living room .png
7	Broad	Anong nangyari sa kwarto?	Sagutin ang tanong gamit ang isang buong pangungusap.	(7) man putting clothes in suitcase.png
8	Narrow	Sino ang pumitas ng bulaklak?	Sagutin ang tanong gamit ang isang buong pangungusap.	(8) girl picking flowers.png
9	Topic	Eh yung lalaki, anong ginawa niya?	Sagutin ang tanong gamit ang isang buong pangungusap.	(9) man frying a fish.png
10	Broad	Anong nangyari sa labas?	Sagutin ang tanong gamit ang isang buong pangungusap.	(10) boy with a ball outside.png
11	Narrow	Sino ang bumili ng sardinas?	Sagutin ang tanong gamit ang isang buong pangungusap.	(11) kid buying at a store.png
12	Topic	Eh yung lalaki, anong ginawa niya?	Sagutin ang tanong gamit ang isang buong pangungusap.	(12) guy giving a gift .png
13	Broad	Anong nangyari sa handaan?	Sagutin ang tanong gamit ang isang buong pangungusap.	(13) guy bringing lechon.png
14	Narrow	Sino ang tumawag ng taxi?	Sagutin ang tanong gamit ang isang buong pangungusap.	(14) girl calling taxi.png
15	Topic	Eh yung babae, anong ginawa niya?	Sagutin ang tanong gamit ang isang buong pangungusap.	(15) girl making ham.png

Set B.

Set	Condition	Prompt	Instruction	Image
1	Narrow	Sino ang kumagat ng mansanas?	Sagutin ang tanong gamit ang isang buong pangungusap.	(1) boy eating apple.png
2	Topic	Eh yung babae, anong ginawa niya?	Sagutin ang tanong gamit ang isang buong pangungusap.	(2) girl drinking coffee.png
3	Broad	Anong nangyari sa kusina?	Sagutin ang tanong gamit ang isang buong pangungusap.	(3) girl wiping the table.png
4	Narrow	Sino ang gumawa ng takdang-aralin?	Sagutin ang tanong gamit ang isang buong pangungusap.	(4) girl doing homework.png
5	Topic	Eh yung bata, anong ginawa niya?	Sagutin ang tanong gamit ang isang buong pangungusap.	(5) girl closing the door .png
6	Broad	Anong nangyari sa sala?	Sagutin ang tanong gamit ang isang buong pangungusap.	(6) girl watching tv in living room .png
7	Narrow	Sino ang naglagay ng damit sa maleta?	Sagutin ang tanong gamit ang isang buong pangungusap.	(7) man putting clothes in suitcase.png
8	Topic	Eh yung babae, anong ginawa niya?	Sagutin ang tanong gamit ang isang buong pangungusap.	(8) girl picking flowers.png
9	Broad	Anong nangyari sa kusina?	Sagutin ang tanong gamit ang isang buong pangungusap.	(9) man frying a fish.png
10	Narrow	Sino ang naghagis ng bola?	Sagutin ang tanong gamit ang isang buong pangungusap.	(10) boy with a ball outside.png
11	Topic	Eh yung bata, anong ginawa niya?	Sagutin ang tanong gamit ang isang buong pangungusap.	(11) kid buying at a store.png
12	Broad	Anong nangyari sa bahay?	Sagutin ang tanong gamit ang isang buong pangungusap.	(12) guy giving a gift .png
13	Narrow	Sino ang nagdala ng litson?	Sagutin ang tanong gamit ang isang buong pangungusap.	(13) guy bringing lechon.png
14	Topic	Eh yung babae, anong ginawa niya?	Sagutin ang tanong gamit ang isang buong pangungusap.	(14) girl calling taxi.png
15	Broad	Anong nangyari sa kusina?	Sagutin ang tanong gamit ang isang buong pangungusap.	(15) girl making ham.png

Set C.

Set	Discourse	Prompt	Instruction	Image	
1	Topic	Eh yung lalaki, anong ginawa niya?	Sagutin ang tanong gamit ang isang buong pangungusap.	(1) boy eating apple.png	
2	Broad	Anong nangyari sa kapehan?	Sagutin ang tanong gamit ang isang buong pangungusap.	(2) girl drinking coffee.png	
3	Narrow	Sino ang naglinis ng mesa?	Sagutin ang tanong gamit ang isang buong pangungusap.	(3) girl wiping the table.png	
4	Topic	Eh yung estudyante, anong ginawa niya?	Sagutin ang tanong gamit ang isang buong pangungusap.	(4) girl doing homework.png	
5	Broad	Anong nangyari sa bahay?	Sagutin ang tanong gamit ang isang buong pangungusap.	(5) girl closing the door .png	
6	Narrow	Sino ang nanood ng TV?	Sagutin ang tanong gamit ang isang buong pangungusap.	(6) girl watching tv in living room .png	
7	Topic	Eh yung lalaki, anong ginawa niya?	Sagutin ang tanong gamit ang isang buong pangungusap.	(7) man putting clothes in suitcase.png	
8	Broad	Anong nangyari sa hardin?	Sagutin ang tanong gamit ang isang buong pangungusap.	(8) girl picking flowers.png	
9	Narrow	Sino ang nagprito ng isda?	Sagutin ang tanong gamit ang isang buong pangungusap.	(9) man frying a fish.png	
10	Topic	Eh yung lalaki, anong ginawa niya?	Sagutin ang tanong gamit ang isang buong pangungusap.	(10) boy with a ball outside.png	
11	Broad	Anong nangyari sa tindahan?	Sagutin ang tanong gamit ang isang buong pangungusap.	(11) kid buying at a store.png	
12	Narrow	Sino ang nagbigay ng regalo?	Sagutin ang tanong gamit ang isang buong pangungusap.	(12) guy giving a gift .png	
13	Topic	Eh yung lalaki, anong ginawa niya?	Sagutin ang tanong gamit ang isang buong pangungusap.	(13) guy bringing lechon.png	
14	Broad	Anong nangyari sa kalsada?	Sagutin ang tanong gamit ang isang buong pangungusap.	(14) girl calling taxi.png	
15	Narrow	Sino ang gumawa ng hamon?	Sagutin ang tanong gamit ang isang buong pangungusap.	(15) girl making ham.png	