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

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Abstract

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

1 Background of the Study

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

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

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

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

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

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

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

2 Research Questions

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

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

3 Significance of the Study

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

4 Scope and Delimitations

4.1 Inclusion Criteria

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

An indigenous Philippine language is herein defined as a variety of language that belongs to the Philippine subgroup of languages, which is in turn a branch of the Western Malayo-Polynesian subgroup. Languages such as Philippine English and Hokkien Chinese, while spoken in the Philippines, ultimately belong to different subgroups

and are not of the Philippine subgroup; therefore studies on these languages were not included in the present study.

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

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

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

4.2 Delimitations

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

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

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

5 Research Design

5.1 On Scoping Reviews

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

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

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

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

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

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

5.2 Data Collection

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

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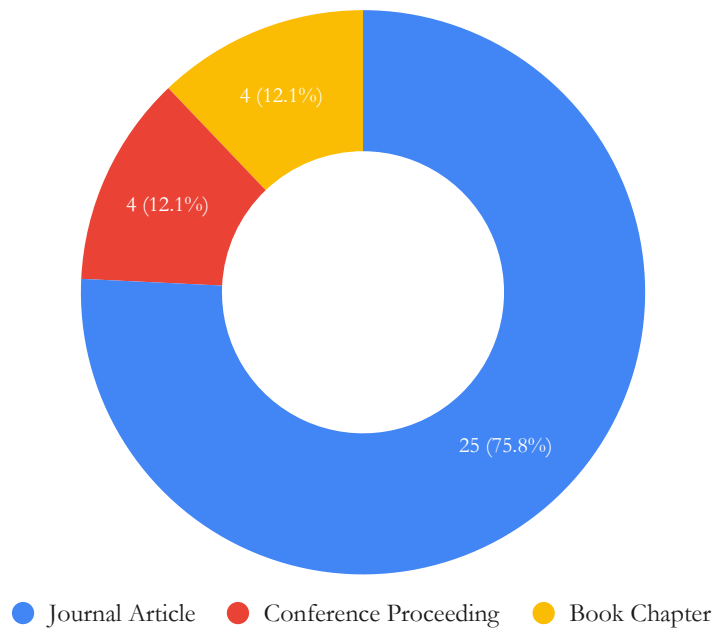
6 Data Analysis and Discussion of Findings

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

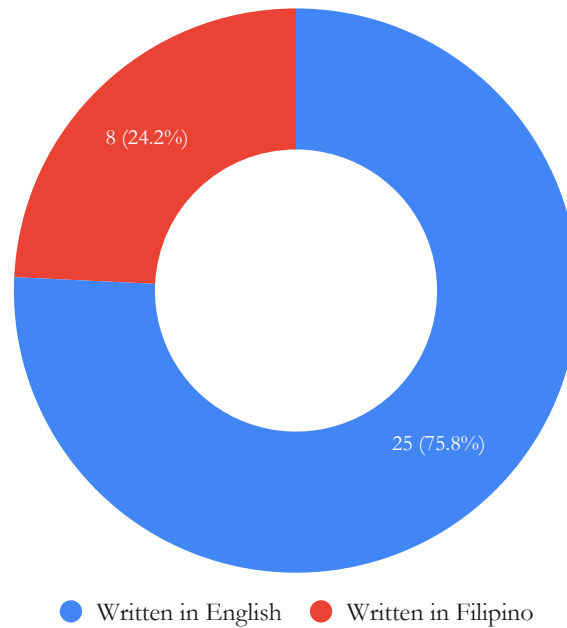## 6.1 General Characteristics of the Research Sample

Figure 1
Breakdown of Research Sample According to Publication Type

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

Figure 2

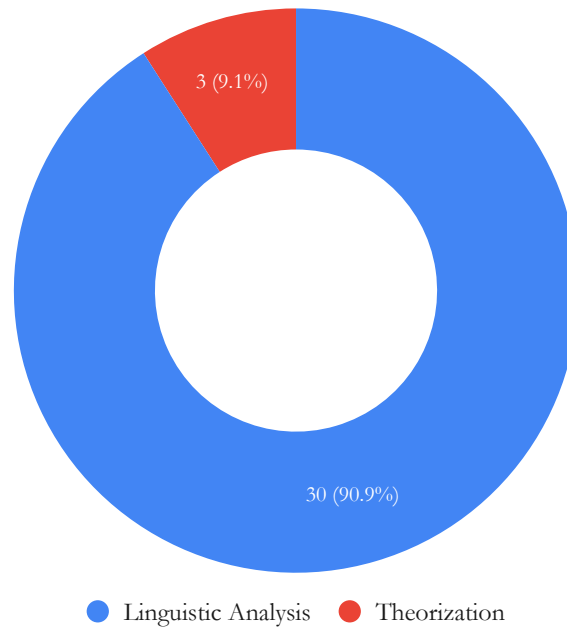*Breakdown of Research Sample According to Language Used*

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

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

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

Figure 3
Breakdown of Research Sample According to Research Type

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

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

6.2 Topics and Languages Covered by the Research Sample

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

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

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

Table 1

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

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

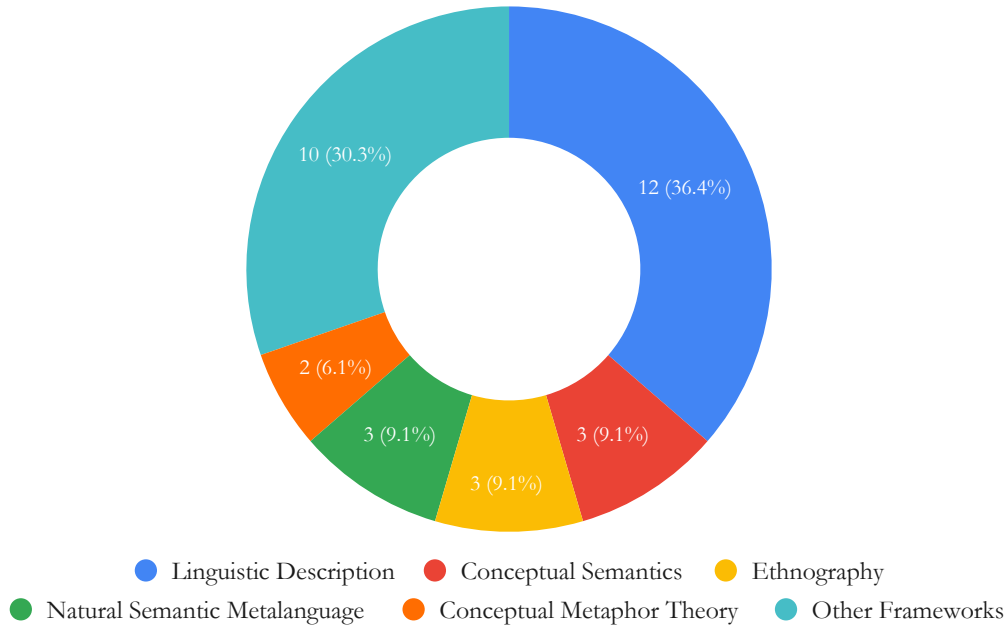| Language	Topic	Research Papers
Itbayat (2)	Lexemes/Semantic Domains	Gallego, 2018; Zorc, 2004
Kankanaey (2)	Lexemes/Semantic Domains	Gallego, 2018; Zorc, 2004
Kinaray-a (2)	Metaphors	Lee, 2019
	Lexemes/Semantic Domains	Gallego, 2018
Maranao (2)	Lexemes/Semantic Domains	Gallego, 2018; Zorc, 2004
Masbate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

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

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

6.3 Semantic Theories and Methodologies Used

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

Figure 4

Semantic Theories and Methodologies Used by Research in the Sample

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

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

6.4 Findings and Discussion

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

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

Research on semantics also provides greater insight into the meanings hidden within the lexicons of our local languages. Because of this, the study of Philippine semantics not only attracts researchers trained in linguistics. Based on the sample, the analysis of the way languages organize and structure concepts and the underlying meanings behind those concepts was a research interest among other social science researchers as well. The study of semantics has applications in fields such as anthropology, psychology, education, and literary study. Tampos-Cabazares (2016) used an ethnographic approach to render understandable the "pathological" violence and killings committed by the

Agusan Manobo by exploring the centrality of the concepts *ginhawa*, *pangayaw*, and *husay* and how these inform the Agusan Manobo's notions of conflict arbitration and resolution. The resultant work provides a point of entry for understanding the conditions and the decision-making processes which push an ethnolinguistic group into certain forms of behavior incomprehensible to mainstream Filipino society.

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

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

7 Conclusion and Recommendations

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

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

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

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

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

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

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

Acknowledgments

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