

## The Lexical Trend of Backward Speech among Filipino Millennials on Facebook

Bethany Marie Cabantac-Lumabi<sup>1</sup>

<sup>1</sup> Far Eastern University – Manila, Philippines

<p><b>Article Info</b></p> <p><i>Article history:</i>          Received 05 September 2020          Revised 16 November 2020          Accepted 18 November 2020</p> <hr/> <p><b>Keywords:</b>          Optimality Theory,          Internet Neologisms,          Philippine English</p> <hr/> <p><b>Paper Type :</b>  <b>Research Article</b></p> <hr/> <p>Corresponding Author:</p> <p><b>Bethany Marie Cabantac-Lumabi</b></p> <p>Email:</p> <p><a href="mailto:blumabi@feu.edu.ph">blumabi@feu.edu.ph</a></p>	<p><b>Abstract</b></p> <p><b>Purpose:</b> <i>This study is an attempt to understand how Millennials use backward speech on their Facebook statuses and how their lexicon is incorporated into a grammar of novel items in English in the Philippines.</i></p> <p><b>Methodology/ Approach:</b> <i>Facebook statuses with the two trending backward speeches such as “lodi” and “werpa” are the inputs of this study since they top the list of more than 20 Tagalog slang words for everyday use of modern Filipinos. Through the Optimality Theory (Mc Carty, 2007; Prince &amp; Smolensky, 2004) process and lexical analysis, these backward speeches were classified by literature as speech disguise, joke, and euphemism, while the hashtags are basically tags used to categorize conversations between users.</i></p> <p><b>Findings:</b> <i>Despite its limitations, the results of the study describe and record a different form of Philippine English on Facebook that occurs from the optimal satisfaction of conflicting constraints. Evidently, the #werpa and #lodi are more contemporary and considerable internet slang (e.g. backward speech) for Philippine Millennials, who are active on posting their Facebook statuses to enhance group exclusivity. Its meanings are based on the context of the Facebook posts rooted in social connections. This unrestricted form of grammar of Facebook users in the Philippines is moving around the social world for years because of its consistent use online.</i></p> <p><b>Conclusion:</b> <i>As the English language form changes more quickly, technologies continue to develop and allow the transmission of new set of Philippine slang to pass from Millennials to the future digital natives. The interest of the study on lexical trends reveals optimal aspects of grammatical phenomena which identify and order words based on their growing use.</i></p>
---	--

### 1. Introduction

Internet neologisms are creative and playful words which contribute to increasing English vocabulary. These contemporary expressions are usually coined words which are patronized and popularized by social media influencers and users. Language is dynamic and the Internet is a great source of thriving words to make or break the English language of the digital natives – the Millennials. Millennial is an identity given to a broadly and vaguely defined group of young people: anyone born between 1981 and 1996 (ages 23-38 in 2019) is considered a Millennial (Dimock). Relatively, as of 2019, women aged 18 to 24 were the largest Facebook users, while male users were between the ages of 25 and 34. With 74 million active users, Facebook remains to be the most popular social media in the Philippines (Sanchez).

Facebook and Millennials are equal trendsetters even on the language they promote online. In Philippine media nowadays, a form of Tagalog slang from the 60s is making a

comeback and being popularized by the Filipino Millennials through social media. Historically, Tagalog is an Austronesian language which is related to languages spoken in Hawaii, Samoa, and Indonesia. Speakers of Tagalog from all societal levels commonly incorporate non-Tagalog words into their speech in a technique known as “code switching”. The hybrid that combines Tagalog and English is known as “Taglish”. The Tagalog language also includes a kind of slang known as “binaliklad”, or backward speech in which syllables may be reversed – making the word *pater*, which means father, into *erpat* (Sundem et al).

In Conklin’s (in Lefkowitz, 1991) studies on the Tagalog language game, “binaliklad” points out that speakers use this speech disguise in daytime conversations for amusement, as a test of their ability to avoid or obscure direct statements, especially in the presence of eavesdropping kinsmen. It is also used for courting situations in crowded surroundings, entertainment, and concealment; for instance, preventing older relatives, nonrelatives, younger siblings, servants, vendors, and in general, any non-member of one’s own group from understanding conversation. Some use it for joking and teasing to gain prestige among their peers, while adults use it to amuse themselves. In certain social contexts, “baliklad” is used euphemistically, to weaken the impact of certain expressions that might be considered either improper or obscene. A number of words and short phrases of baliklad origin have penetrated everyday Tagalog (39).

Likewise, Cagalingan (in De Guzman, 2017) of the Komisyon sa Wikang Filipino indicated that this was a method used by revolutionaries to hide their identities such as the writer and one of the Philippine heroes Marcelo H. del Pilar. He used the pseudonym “Plaridel,” which is a jumbled-up version of his surname. Later on, in the 60s, young people who lived in housing projects of the government in Quezon City came up with a slang “*jeproks*” (projects). Then, in the 70s, a Mike Hanopol song entitled “*LakisaLayaw (Jeproks)*” became popular where he talked about how the children who live in these communities, the *jeproks*, are “*lakisalayaw*” or spoiled and often get embroiled in drugs. Indeed, there were reports during those days that these areas became hotbeds for drug dealing (Guzman ).

Similarly, Rixhon (as cited in Lopez, 2006) recognizes that among the Tausugs of Sulu, there is “codified speech” called *malikata*, a sentence in which words are inverted, mixed, or twisted according to prearranged code agreed upon by the sender and receiver of the message. The practice involves a play of syllables and letter inversion but did not elaborate through detailed examples how this is done (107). During those times, the syllable reversal of Tagalog words was only spoken by a young minority (i.e. teenagers, college students, etc.) that serves as their derivation to conceal the meaning of their language from others or their parents/family. Consequently, this spoken feature of Tagalog is reviving in a different context (i.e. Facebook) and expanding with more groups of users in the Philippines from oral to written form. For Rumšienė (2004), the start of the millennium with the development of the Internet is parallel to the expansion of the Internet culture mainly mediated through the written language. Internet communication is influenced firstly by such physical limitations as the speed of typing which is lower than that of speaking, the amount of symbols, or the absence of prosodic and paralinguistic features in the language, and secondly by the Internet culture. This leads to a

language bearing a specific code of symbols together with alternative lexis and rules of syntax, grammar, and morphology.

Therefore, slang has successfully crossed from oral to written realization in the Internet use. It has also adapted to synchronous Internet communication because of its primarily social functions. It is a component of spoken interaction and is seldom used in writing. It signals informality and often irreverence or defiance. It is the distinctive vocabulary of groups: the use of the same slang enhances group identity and separates insiders from outsiders. Its meanings are often derived entirely from situational context and can be ironic and rooted in social connections. The power to evoke feelings of being connected to other – of belonging to a group, of being accepted, and of being socially secure – distinguishes slang from other sorts of informal vocabulary. People who use the same slang feel connected to each other and disconnected from those who do not (Eble, 2009). Apparently, “binaliktad” or reversed speech is not only present in some Tagalog slangs, but also in the second language in the Philippines, English. Interchangeably, the rationale behind the construction of “binaliktad” Tagalog and English in a social medium, such as Facebook, is a recognized and progressive lexical trend among millennials in the Philippines. The revival of the “binaliktad” words on the internet gave some English and Tagalog words a different set of definition apart from its denotations.

The formation of Tagalog slang has become a language game or ludlings for some researchers. Ludlings or play languages are usually created by children as a way to separate themselves from, include themselves in or disguise themselves from a particular social group (urbandictionary.com). Gil (2006) studied one of ludlings in Tagalog presented by Conklin. He referred this as “Golagat” (Tagalog) which was formed by reversing the order of segments. He examined some aspects of this interaction, and showed how it may yield valuable insights into the grammar of Tagalog and the structure of phonological theory. It appears that, his analysis thus underscores the structural affinity of “Golagat with a variety of ludlings in diverse languages, demonstrating how ludlings may yield insights into grammatical theory and the grammars of particular languages. Speaking backwards in Tagalog shows how the playful creativity of Filipino children, constrained by the exigencies of phonological theory, interacts with the grammar of Tagalog to give rise to a ludling of exceptional beauty (Gil 305).

Since most Tagalog roots are disyllabic, this does not pose a challenge for spontaneous creation and immediate recognition. Some of these reversals take additional morphology and have gained acceptance in their newly lexicalized forms (Grandi 56). In fact, the analysis of lexical trends in Tagalog by Zaraw in 2000 (as cited in Vladimir, 2013) used the framework of Optimality Theory – a central approach in accounting for lexical trends is based on stochastic grammar (Boersma 89). The Philippines is currently using the English-Filipino lexicon that contains 23,520 English and 20,540 Filipino word senses with information on the part of speech and co-occurring words through sample sentences. This lexicon is based on the dictionary of the Commission on the Filipino Language (KomisyonsaWikang Filipino), and digitized by the IsaWika project (Roxas, 1997, in Tan and Lim, 2007).

In this study, Optimality Theory became useful in identifying the lexical trends of the “binaliktad” words on Facebook posts. The basic idea in this theory is that Universal Grammar consists largely of a set of constraints on representational well-formedness, out of which

individual grammars are constructed. The representational system employed, using ideas introduced into generative phonology in the 1970s and 1980s, is rich enough to support two fundamental classes of constraints: those that assess output configurations per se and those responsible for maintaining the faithful preservation of underlying structures in the output. Departing from the usual view, it does not assume that the constraints in a grammar are mutually consistent, each true of the observable surface or of some level of representation. On the contrary: it asserts that the constraints operating in a particular language are highly conflicting and make sharply contrary claims about the well-formedness of most representations. The grammar consists of the constraints together with a general means of resolving their conflicts (Prince and Smolensky 22).

One of the basic premises of Optimal Theory (OT) is called richness of the base. The “base” is the set of inputs to the grammar which is “rich” because, by hypothesis, it is not subject to any language-particular restrictions. In syntax, richness of the base means that systematic differences between languages cannot be attributed to systematic differences in the contents of their lexicons. Rather, it simply means that the lexicon as a system is not subject to any language-particular requirements. Furthermore, it means that explanations for linguistic phenomena cannot involve carefully contrived limits on the inputs to the grammar (McCarthy, 2007, p. 17). In other words, language is a system of conflicting forces and the scope of OT is to explain a wide range of linguistic phenomena including lexicon.

In Optimality Theory, every constraint is universal and the same in every language. The universal nature of constraint makes some immediate predictions about language typology. If grammars differ only by having different rankings of constraints, then the set of possible human languages is determined by the constraints that exist. OT predicts that there cannot be more grammars than there are permutations of the ranking of constraints (Prince & Smolensky, 2004). Thus, in this study, the constraints were derived from the literature of backward speeches as adapted from the method of Hoeks and Hendriks (n.d.), where they aimed to use constraints that have already been proposed in the theoretical and empirical literature, and that have received some form of independent support. All other constraints would be viewed as tentative which would permit to generate clear predictions. These constraints are presented in a tableau. Tableau cells which contain one or more asterisks (\*) indicate that the candidate at the far left in that row violates the constraint mentioned at the top of that column. The ! symbol indicates that a violation is fatal (crucial to eliminating).

In this study, the two English backward speeches “lodi” and “werpa”, popularized by Filipino Millennials on Facebook, are taken differently. Lodi is the reversed spelling of the English word “idol” mostly used to refer to entertainment celebrities such as singers and actors, although this is now more often used to refer to a familiar person who just did something impressive. Werpa is the inversion of the syllables “pawer”, the phonetical translation of “power”. “Werpa” is used to indicate giving support, which is far different from the dictionary meaning of power as the ability to do something or act in a particular way. Apparently, these two backward speeches in English are trending on social media particularly Facebook from the last quarter of 2017 and until now. Therefore, this study is an opportunity to understand how Millennials use backward speech on their Facebook statuses and how their lexicon is

incorporated into a grammar of novel items in Philippine English. In fact, “werpa” and “lodi” top the list of more than 20 Tagalog slang words for everyday use (Anza, 2017) of modern Filipinos.

The interest of the study on lexical trends “shows all the aspects of grammatical phenomena, and they should be described with the same mechanisms linguists use to describe regular grammatical phenomena (Vladimir, 2013).” Moreover, trend is a feature for detecting words in a corpus which undergoes changes in the frequency of use in time (diachronic analysis). Trends identify and order words based on their growing use (new words or neologisms) or decreasing use in the given period of time. Therefore, this study examines: (1) the millennials’ use of “lodi” and “werpa” on their Facebook posts; (2) the lexical trend of “lodi” and “werpa” in the posts of Facebook users; and (3) the implication of the lexical trend of backward speech such as “lodi and “werpa” to Philippine English.

## 2. Methodology/Approach

As mentioned, this study is guided by the process of Optimality Theory (Prince & Smolensky, 2004), which the basic premise is the richness of the base. In this study, the base is the derived meaning of “werpa” and “lodi” in Philippine context where “lodi” (idol) refers to a familiar person who just did something impressive), while the denotative meaning of idol is an image or representation of a god used as an object of worship. Furthermore, “werpa” (power) indicates giving support to a person, advocacy, event, etc., while the dictionary meaning of power is the ability or right to control people and events, or to influence the way people think in important ways.

Initially, both backward speeches, “werpa” and “lodi” were popularly used on Facebook with hashtags. Facebook’s hashtags are basically tags used to categorize conversations between users. Facebook offers 3 usage tips for the hashtag: search for a specific hashtag from the user’s search bar; click on hashtags that originate on other services (i.e. Instagram); and compose posts directly from the hashtag feed and search results (Balasa, 2017). Hence, these Facebook statuses and hashtags with the reversed words “lodi” and “werpa”, which were posted publicly on Facebook, were collected for a month and analyzed as the input in the study for they rationalize that reversed lexicon is not subjected to any language-particular requirements.

In addition, the literature on backward speech or “binaliktad” words show a different set of use and purpose, which were taken as the constraints in this study. Specifically, the following constraints (C) were regarded in determining the use and purpose of “werpa” and “lodi” on Facebook posts: (C1) Speech disguise (Conklin 89)/ hide identities (Guzman 59); (C2) Joke or tease to gain prestige (Conklin 12); (C3) Euphemism – weaken the impact of certain expressions that might be considered either improper or obscene.

In the data gathering, the Facebook publicly presented 253 posts with “werpa” and “lodi” words and hashtags. However, only 154 posts were used in the lexical analysis because 36 have duplicated content and 63 have “werpa” and “lodi” in their Facebook account names, which are not included in the scope of this study. Both “werpa” and “lodi” words with hashtags

were used in the 154 posts which serve as the corpus of this study. The Facebook users of these 154 public posts received informed consent on the conduct of the research which assured the anonymity and exclusion of their Facebook profiles as data for analysis.

Similar with the tableau in Optimality Theory (OT), the data in this study were presented and analyzed in a tableau where constraints are listed on top from left to right in order of descending strength: (C1) Speech disguise (Conklin, as cited by Lefkowitz, 1991)/ hide identities (Cagalingan, as cited in De Guzman, 2017); (C2) Joke or Tease to Gain Prestige (Conklin, as cited by Lefkowitz, 1991); and (C3) Euphemism – weaken the impact of certain expressions that might be considered either improper or obscene (Conklin, as cited by Lefkowitz, 1991). These constraints are the validated reasons for establishing “binaliktad” or backward speeches in Philippine context. On the other hand, the left column of the tableau shows separately the input of derived meanings of “werpa” and “lodi” as the richness of the base. It is mentioned that OT supposes that there are no language-specific restrictions on the input. Every grammar can handle every possible input. Thus, the (A) hashtags – categories of conversations between users in social media – and the (B) derived definition of “werpa” and “lodi” are the considered input or candidates for optimality.

In the analysis of data, this study followed the process of Mc Carty (2007) in recording the use and lexical trend of “werpa” and “lodi” words on the Facebook posts by Millennials. Given the two candidates, A (i.e. hashtags such as #werpa and #lodi) and B (i.e. werpa – support to a person, advocacy, event, etc. and lodi – a familiar person who just did something impressive), A is better than B on a constraint if A incurs fewer violations than B. Candidate A is better than B on an entire constraint hierarchy if A incurs fewer violations of the highest-ranked constraint distinguishing A and B. A is optimal in its candidate set if it is better on the constraint hierarchy than all other candidates. Then, the pointing finger (☞) marks the optimal candidate, and each cell displays an asterisk for each violation for a given candidate and constraint. Once a candidate does worse than another candidate on the highest ranking constraint distinguishing them, it incurs a crucial violation (marked in the tableau by an exclamation mark!). Once a candidate incurs a crucial violation, it cannot be optimal, even if it outperforms the other candidates on the rest of constraints. Hence, the 154 selected Facebook statuses posted undergone recording violation in the given constraints which were linearly placed in the tableau to achieve the purpose of the study. The results were descriptively interpreted and guided by the central notion of optimality.


The idea is that by examining the marks assigned by the constraints to all the candidate outputs for a given input; it can show the least marked, or optimal, one: this is the one and only well-formed parse that may be assigned to the input. The relevant notion of ‘least marked’ is not the simplistic one of just counting numbers of violations. Rather, in a given language, different constraints have different strengths or priorities: they are not all equal in force. When a choice must be made between satisfying one constraint or another, the stronger must take priority. The result is that the weaker will be violated in a well-formed surface structure (Tesar and Smolensky). Then, the evaluation of the tableaux was to eliminate suboptimal candidates


from the candidate set. Suboptimal candidates for the constraints  $C \in C1, C2, C3, \dots n$  means remove all candidate set which are suboptimal for constraint C until there is one candidate left.

### 3. Analysis and Results

The two trending words “lodi” and “werpa” on Facebook posted by Millenials are the interest of this study. Through lexical analysis adapted from Mc Carty (2007), there were 154 statuses with “werpa” and “lodi” backward speeches and hashtags posted on Facebook for a whole month. These backward speeches were classified by literature as speech disguise, joke, and euphemism, while the hashtags are basically tags used to categorize conversations between users. In other words, Millenials use “werpa” and “lodi” and hashtags to belong to the trending conversations among Facebook users. These backward speeches are not only popular among Millenials but also among their aunts and uncles and groovy elders. In fact, “werpa” and “lodi” top the list of more than 20 Tagalog slang words for everyday use (Anza, 2017) of modern Filipinos.


Through Optimality theory, the lexical trend of “lodi” and “werpa” on Facebook posts were tabled separately, but both tables were arranged where the following constraints are:(C1) Speech disguise (Conklin 33) and hide identities (Cagalingan, in De Guzman, 2017); (C2) Joke or Tease to Gain Prestige (Conklin 71); and (C3) Euphemism/ weaken the impact of certain expressions that might be considered either improper or obscene (Conklin 59) as listed on top from left to right in order of descending strength. These constraints were established by the proponents in the literature of Tagalog reversed words or slangs. While, on the left column has the two candidates or input: (A) hashtags and (B) derived meanings. The input defines the candidate set, in other words, it determines which output candidates compete for optimality, and which do not (Prince and Smolensky, 2004).


Tableau 1 shows that #werpa (A) is better than its derived meaning (B) on an entire constraint hierarchy, since A incurs fewer violations represented by asterisk (\*). A is optimal in its candidate set because it is better on the constraint hierarchy than the other candidate (B). The pointing finger  marks the optimal candidate A, since candidate B acquires multiple asterisks because it violates the constraints several times; a crucial violation (marked in the tableau by an exclamation mark) cannot be optimal.

Input	C1 Speech disguise	C2 Joke or Tease to Gain Prestige	C3 Euphemism/ weaken the impact of certain expressions that might be considered either improper or obscene
A. Hashtags 	**	**	**
B. Derived meaning	*****	***** ***** ****!	***** *****

*Tableau 1. Optimal Use of “Werpa” among Millenials on Facebook*

The results prove that Millennials are maximizing the objective of the #werpa on their Facebook posts that is to categorize their conversations among users. The equally distributed asterisks on the entire set of constraints show that occasionally #werpa is misused on Facebook posts as a speech disguise (Conklin)/ hide identities (De Guzman, 2017); a joke or tease to Gain Prestige (Lefkovitz, 1991); and as a euphemism to weaken the impact of certain expressions that might be considered either improper or obscene (Conklin, in Lefkovitz, 1991). Still, tableau 1 depicts that #werpa is the least appalling use of the backward speech “werpa”, than its derived meaning – to support a person, advocacy, event, etc.

Likewise, in tableau 2, the reversed English word “lodi” (idol) presents candidate A is better than B on C1 and C2 since A incurs fewer violations of the highest-ranked constraint distinguishing A and B. And, A is optimal in its candidate set because it is better on the constraint hierarchy than all other candidates. The pointing finger  marks A as the optimal candidate since each cell displays few asterisk for each violation for a given candidate and constraint. On the other hand, candidate B does worse than candidate A on the second ranking constraint because it incurs a crucial violation (marked in the tableau by an exclamation mark). It is mentioned that once a candidate incurs a crucial violation; it cannot be optimal, even if it outperforms the other candidates on the rest of constraints.

Input	C1 Speech disguise	C2 Joke or Tease to Gain Prestige	C3 Euphemism/ weaken the impact of certain expressions that might be considered either improper or obscene
A. Hashtag 	**	**	
B. Derived meaning	*****	***** ***** ****!	***** *****

*Tableau 2. Optimal Use of “Lodi” among Millennials on Facebook*

Therefore, the #werpa and #lodi are more contemporary and considerable internet slang (e.g. backward speech or binaliktad) for Philippine Millennials, who are active on posting their Facebook statuses because “the use of the same slang enhances group identity and separates insiders from outsiders. Its meanings are often derived entirely from situational context and can be ironic and rooted in social connections. The power to evoke feelings of being connected to other – of belonging to a group, of being accepted, and of being socially secure – distinguishes slang from other sorts of informal vocabulary. People who use the same slang feel connected to each other and disconnected from those who do not (Eble).”

#### 4. Conclusion



The growing number (i.e. 254 Facebook posts with “werpa” and “lodi”) of the use of “lodi” and “werpa” on Facebook from the last quarter of 2017 to now is making a trend in the language of Philippine Facebook users. In a short span of time, they gained much online attraction, when its Millennial members started to very much appreciate the slang terms used by other members. Backward speech, such as “lodi” and “werpa”, flooded the comments sections. And soon enough, the colloquial words began to spread widely through Filipino social media, like how users see them today (The Summit Express, 2017).

Despite its limitations, the results of the study describe and record a different form of Philippine English on Facebook that occurs from the optimal satisfaction of conflicting constraints. Specifically, #werpa and #lodi are the effect of lexicon optimization because their surface form have the least serious violations of the ranked set of constraints for a language. Though, this study is limited to the use of “lodi” and “werpa” on Facebook, it will also be interesting to discover the trend of backward speech in offline conversations. Nevertheless, it is noted that speaking backwards in Tagalog and English shows “how the playful creativity of Filipino children constrained by the exigencies of phonological theory (Gil, 1996)” and how “lodi” and “werpa” will interact with the grammar of Philippine English in speaking. Becker (2009) pointed that speakers use ranking arguments to identify unpredictable patterns in the language they are exposed to and they build information about lexical items into their constraint ranking. This lexically-enhanced grammar in turn allows speakers to replicate generalizations about their lexicon in dealing with novel items (i.e. #werpa and #lodi).

Evidently, the lexical trending of #werpa and #lodi Facebook statuses are mostly accompanied by Tagalog phrases and sentences. This unrestricted form of grammar of Facebook users in the Philippines is moving around the social world for years because of its consistent use online. As the English language form changes more quickly, technologies continue to develop and allow the transmission of new set of Philippine slang to pass from Millennials to the future digital natives.

## **Acknowledgments**

The author is grateful to her professors at the Philippine Normal University for encouraging her to write research articles as academic requirements in the doctorate program. She is indebted to her remarkable mentors in graduate school namely Dr. Merry Ruth Gutierrez, Dr. Arceli Amarles, Dr. Rosarito Suatengco, and Dr. Elineth Suarez. She thanks the members of her family especially her ever-supportive husband Robert Bon, her adorable son Mateo Bevon, her hardworking mommy Victoria, her loving dad Antonio (+), her sweet sister Vianne, her humorous brother Anthony Victor, her generous aunt Mary Rose, the Casia and Cabantac clans for all their love and support. She shows her gratitude to all her friends (online and offline), colleagues, and students for bringing out the best in her. And, most of all, she is blessed and thankful to the Lord for all of the wonderful people in her life and the gift as a teacher for almost 15 years. To God be the glory!

## **Conflict of Interest**

None

## Funding

None

## Work Cited

- Anza, Precy. *34 Tagalog Slang Words for Everyday Use - Owlcation - Education*. 24 Feb. 2017, owlcation.com/humanities/20-Tagalog-Slang-Words.
- Balasa, Victor. "Facebook Hashtags - How It Works, How to Use It Right." *Hongkiat*, 16 Oct. 2020, www.hongkiat.com/blog/facebook-hashtags/.
- Becker, Michael. "Phonological trends in the lexicon: The role of constraints." (2009).
- Biermeier, Thomas. "Lexical trends in Philippine English revisited." *Philippine ESL Journal* 19 (2017): 25-44.
- Guzman, Nicai de. "The Fascinating History Behind Pinoy Slang." *Esquiremag.ph*, Esquire Philippines, 1 Jan. 1970, www.esquiremag.ph/culture/the-fascinating-history-behind-pinoy-slang--a1729-20171107-lfrm.
- Leon, Patrick Joven S. De. "De Leon: Filipino Slang 2017: What Does 'Lodi' Mean?" *Sunstar*, Sunstar, 16 Oct. 2017, www.sunstar.com.ph/article/169678/Lifestyle/De-Leon-Filipino-slang-2017-What-does-lodi-mean.
- Eble, Connie. "Slang and the internet." *New Challenges in Language and Literature, FALE/UFMG* (2009).
- The Summit Express* "Filipino Colloquial Words: How Lodis Gave Werpa to Ordinary Talk." *The Summit Express*, www.thesummitexpress.com/2017/10/colloquial-words-more-werpa-to-petmalung-lodis.html.
- Gil, David. "How to speak backwards in Tagalog." *Pan-Asiatic Linguistics, Proceedings of the Fourth International Symposium on Language and Linguistics, January 8-10, 1996, Institute of Language and Culture for Rural Development, Mahidol University at Salaya*. Vol. 1. 1996.
- Grandi, Nicola. *Edinburgh handbook of evaluative morphology*. Edinburgh University Press, 2015.
- Hoeks, John CJ, Petra Hendriks, and BCN NeuroImaging Center. "Optimality theory and human sentence processing: Towards a cross-modular analysis of coordination." *Journal of Cognitive Science* 12.1 (2011): 83-128.
- Lefkowitz, Natalie. *Talking backwards, looking forwards: The French language game Verlan*. Vol. 3. Gunter Narr Verlag, 1991.
- Lilenko, Vladimir. *Word-formation and semantic mechanisms in English Internet slang and memes creation and its impact on the Russian language*. Diss. Tartu Ülikooli Narva Kolledž, 2013.
- Lopez, Mellie Leandicho. *A handbook of Philippine folklore*. UP Press, 2006.
- McCarthy, John J. "What Is Optimality Theory? 1." *Language and Linguistics Compass* 1.4 (2007): 260-291.

- Smolensky, Paul, and Alan Prince. "Optimality Theory: Constraint interaction in generative grammar." *Optimality Theory in phonology* 3 (1993).
- Roxas, Rachel Edita, Charibeth Cheng, and Nathalie Rose Lim. "Philippine language resources: trends and directions." *Proceedings of the 7th Workshop on Asian Language Resources (ALR7)*. 2009.
- Rumšienė, Goda. "Development of Internet English: alternative lexis, syntax and morphology." *Kalbų studijos* 6 (2004): 48-55.
- Sanchez, Published by Martha Jean, and Jul 19. "Philippines: Number of Facebook Users." *Statista*, 19 July 2020, [www.statista.com/statistics/490455/number-of-philippines-facebook-users/](http://www.statista.com/statistics/490455/number-of-philippines-facebook-users/).
- Seiter, Courtney. "The secret psychology of Facebook: Why we like, share, comment and keep coming back." *Date: April 23* (2015): 2015.
- Sundem, Garth, Jan Krieger, and Kristi Pikiwicz. *10 Languages You'll Need Most in the Classroom: A Guide to Communicating with English Language Learners and Their Families*. Simon and Schuster, 2014.
- Tesar, Bruce, and Paul Smolensky. "The learnability of Optimality Theory: An algorithm and some basic complexity results." (1995).
- Tsvetkov, Yulia, Waleed Ammar, and Chris Dyer. "Constraint-based models of lexical borrowing." *Proceedings of the 2015 Conference of the North American Chapter of the Association for Computational Linguistics: Human Language Technologies*. 2015.