

Semiotic analysis of the Facebook postings of grade 11 learners via syntax and semantics

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This paper attempts to analyze the January Facebook postings of Grade 11 Students of Bunguiao National School. The analyses carried out in the paper covered the textual contents of the postings via the interplay of syntax and semantics—that is, the subject of the post, a grammatical function vis-à-vis the semantic role. This paper claims that the forgoing interplay analysis corroborates the findings in the themes (the semantics) of the different contents of the posts, the non-textual postings: photos, smileys/emoticons, and videos. The analyses of the semantic contents of the postings were analyzed via coding, categorizing and theorizing. As this paper is in part qualitative in nature, the participants, whose FB posts have been subjected to analyses, have been chosen purposively. A small facet of the paper involves a quantitative analysis, i.e. the frequency counts of the interpenetration of syntactic and semantic constituents of the textual postings of the participants. At some extent, this paper draws upon the mixed methods approach in its attempt to put the data under scholarly lucubration.

Keywords: Facebook, semiotics, semantics-syntax interface

1 Introduction

Facebook is among the most trafficked social networking sites (SNSs) on the Internet. As of June 2011, *Facebook* is the top ranked SNS in the world (with 550 million users) according to Rambe (2012) as he indicated in his study on Facebook posting-related research. It is inferred that after five years, this number will exponentially have increased as this is manifest in the increase to 1,23bn monthly active users and 757 million daily users who log onto Facebook (Awan, 2016).

Lai and To (2015) aver that social media have become a vital part of social life. And they further claim that it affects the beliefs, values and attitudes of people, as well as their intentions and behaviors. Some people misuse and overuse the liberty afforded to them by Social Networking Sites like Facebook. This has been evident in the study executed by Awan (2016) where he claims that as a result of recent figures that show an increase in online anti-Muslim abuse, there is a pertinent need to address the issue about Islamophobia on social media. Media is drawn upon for purposes of expression of hate or anything other related to it.

As most of the students in Bunguiao National High School possess a Facebook account, it is desiderated that the themes of their posts be analyzed and

synthesized for the purpose of identifying their usual and common Facebook postings in that this can shed light to the guidance that can be made available to them relative to SNS responsible utilization. In the study that was desired to be done, the Facebook posts of senior high school students of Bunguiao National High School were analyzed and synthesized with premium given to the two areas of analysis related to theoretical linguistics: syntax and semantics of semiotics.

Taro (2015) explains that semiotics is the study of signs. Signs take the form of words, images, sounds, odours, flavours, acts or objects but such things have no intrinsic meaning and become signs only when we invest them with meaning. Taro proposes that semiotics is constituted of three branches: *Semantics* which is the relation between signs and the things to which they refer; their denotata (an actual object referred to by a linguistic expression); *Syntactics* which is the relations among signs in formal structures; and *Pragmatics* which is the relation between signs and their effects on people who use them. Furthermore, he delineates the variation among these three branches. Syntactics is the branch of semiotics that deals with the formal properties of signs and symbols. It deals with the rules that govern how words are combined to form phrases and sentences. According to Charles Morris “semantics deals with the relation of signs to their designate and the objects which they may or do denote” (Foundations of the theory of science, 1938); and, pragmatics deals with the biotic aspects of semiosis, that is, with all the psychological, biological and sociological phenomena which occur in the functioning of signs.

Taro (2015) explains the work of Saussure with the following remarks: nothing is more appropriate than the study of languages to bring out the nature of the semiological problem’ (Nature of the Linguistics Sign, 1916). Semiotics draws heavily on linguistic concepts, partly because of the influence of Saussure and because linguistics is a more established discipline than the study of other sign systems.

Gurr (2001) discusses the similarity between the linguistics of natural language and the sub-disciplines’ similar relevance to the study of non-text linguistics. He explicates that the study of natural languages is typically separated into the following categories: phonetics and phonology; morphology; syntax; semantics; pragmatics; and discourse. With the obvious exception of the first, the study of analogous categories in diagrammatic languages is at the same time both highly revealing of differences and similarities between the two forms of representation; and also provides a structure in which to explore the alternative means by which a diagram may capture meaning.

Further, it is elucidated—in relation to linguistics and semiotics—that morphology concerns the shape of symbols. In contrast to typical textual languages, the basic vocabulary elements in some diagrammatic language may include such diverse shapes as circles, ellipses, squares, arcs and arrows. These objects often fall naturally into a hierarchy which can constrain the syntax and, furthermore, inform the semantics of the system. This hierarchy may be directly exploited by the semantics of symbols so as to reflect the depicted domain. In addition to a morphological partial typing, symbols may be further categorised

through graphical properties such as size, colour, texture, shading and orientation. For example, the meaning of symbols represented by circles may be refined by distinguishing between large and small, and different coloured circles. Thus, again, part of the structure in the semantic domain is directly captured by morphological or syntactic features. The primary properties of graphical symbols may be considered to be: value (greyscale shading); texture (patterns); colour; orientation; size; thickness (Gurr, 2001).

The relationship between syntax and semantics is emergent in the study of linguistics or languages. This can be taken into account in the analysis of language. For the purpose of this paper, such analysis was carried out particularly in the syntax and semantics interface of the subject's semantic role. The Ohio State University Press explicates this vividly: The fact that the meaning of a sentence depends on the meanings of the expressions it contains and on the way they are syntactically combined is called the principle of compositionality. As a result, even though all languages have a finite lexicon, they all allow the construction of an infinite number of meaningful sentences. In this sense, syntax and semantics are intimately related.

Jurafsky and Martin (2015) define the semantic roles as representations that express the abstract role that the arguments of a predicate can take in the event. They summarize the semantic roles as follows:

AGENT. The volitional causer of an event
 EXPERIENCER. The experiencer of an event
 FORCE. The non-volitional causer of the event
 THEME. The participant most directly affected by an event
 RESULT. The end product of an event
 CONTENT. The proposition or content of a propositional event
 INSTRUMENT. An instrument used in an event
 BENEFICIARY. The beneficiary of an event
 SOURCE. The origin of the object of a transfer event
 GOAL. The destination of an object of a transfer event

To further explain the foregoing roles, the examples taken from Jurafsky and Martin (2015) are in order:

AGENT. The *waiter* spilled the soup.
 EXPERIENCER. *John* has a headache.
 FORCE. The *wind* blows debris from the mall into our yards.
 THEME. Only after Benjamin Franklin broke the *ice*...
 RESULT. The city built a *regulation-size baseball diamond*...
 CONTENT. Mona asked "*You met Mary Ann at a supermarket?*"
 INSTRUMENT. He poached catfish, stunning them with a *shocking device*...
 BENEFICIARY. Whenever Ann Callahan makes hotel reservations for her *boss*...

SOURCE. I flew in from *Boston*.

GOAL. I drove to *Portland*.

Because this paper provides premium to syntax and semantics, the relationship between grammatical relations and the semantic roles are considered and incorporated in the paper. Summer Institute of Linguistics (2004) has the following to say about the foregoing relations. Grammatical relations (subject, object, oblique...) are morphosyntactic, whereas semantic roles (agent, patient, instrument...) are conceptual notions. Semantic roles do not correspond directly to grammatical relations. Notice what varying semantic roles a subject can play are exemplified in Table 1:

Table 1. Semantic roles of subjects

Sentence	Grammatical relation	Semantic role
<i>Bob</i> opened the door with a key.	<i>Bob</i> = SUBJECT	<i>Bob</i> = AGENT
<i>The key</i> opened the door.	<i>The key</i> = SUBJECT	<i>The key</i> = INSTRUMENT
<i>The door</i> opened.	<i>The door</i> = SUBJECT	<i>The door</i> = PATIENT

For this paper, only the grammatical function of subject was investigated and the semantic role of it was examined.

SIL (International 2004) defines subject as a grammatical relation that exhibits certain independent syntactic properties such as the following: (1) the grammatical characteristics of the agent of typically transitive verbs; (2) the grammatical characteristics of the single argument of intransitive verbs; (3) the particular case marking or clause position; (4) the conditioning of an agreement affix on the verb. SIL defines agent as usually the grammatical subject of the verb in an active clause. A prototypical agent is conscious, acts with volition (on purpose), and performs an action that has a physical, visible effect.

Because this paper is a descriptive qualitative paper, the analysis via coding is pivotal. Categorizing is as vital as a process as coding in a qualitative research project; Lane and Menzies (2015) as they cited Bazeley (2007) say that coding is a classification or indexing of certain parts of a text in order to facilitate comparison and retrieval. Strauss (1987) points out “the excellence of the research rests in large part on the excellence of the coding”. For the semantic analysis of the respondents’ postings, codes were arranged in categories that is a bit different from the codes used by Gerolimos (2011): advertisements, hate speech, friendship, complimentary comments, funny comments, news, offensive language, general comments, religious comments, political comments, complaints, thankful comments, suggestions, directions.

Following what this paper has claimed and cited, the following research questions were investigated:

- i What are semantic roles of the subjects (a grammatical function) in the postings of the Senior High School students?
- ii What are the themes of the semantics of the postings of the Senior High School students in Bunguiao National High School?

The first research question aided in the analysis of the relationship of semantics and syntax as these two are parts of the makeup of the language. The first research question incorporated two levels of analysis—taken from the discipline of theoretical linguistics—in the study of semiotics. The second one showcased the semantic themes of the postings of the informants of the study.

At the syntactic level, the construction and structure of the sentences and symbols (e.g. emoticons) were dissected. The subjects of every sentence were analyzed to make sense of how much I-talk happens in the postings of the senior high school learners. At the semantic level, the meanings of their posts—words, phrases, sentences, discourses, signs, symbols—were looked into with utmost attention. The meanings were categorized according to their semantic content. These analyses and syntheses can aid in the thorough and in-depth scrutiny of the themes of the postings of the senior high school students in Bunguiao National High School. To further give pivotal significance to the amalgam of syntax and semantics, the notions of semantic roles and grammatical relations are incorporated in this paper.

2 Methodology

Thereupon the consent of every informant was given, the analyses were initiated. From the ten informants, five were girls and the other five were boys. The postings for the month of January were the ones that had been dissected. For the participants that had more than 15 postings for the month of January, not all the posts were analyzed but only 15-20 postings were examined. For the rest that did not have more than 15 postings, all their posts were put into examination relative to the analysis carried out.

Every literature—word, fragments, sentences, remarks and the like—was analyzed in two ways: syntactically and semantically. One grammatical feature had to be given premium in this paper: the grammatical function or relation—the subject—of a sentence, and the semantic role or thematic role of the subject. This was given consequential significance in the paper in that the involvement of the ‘self’ in the FB postings had to be looked into for the possible utilization of FB, a social media site, as pedagogical tool for the learners. The learners can draw on their own postings for self-reflection relative to paragraph writing. The postings of the learners in Facebook can be indicative of who they are and thus can be a

supplementary basis for the pedagogues in getting to know their students better as time constraint is practically always an issue to consider.

The syntax of the entire posting—the amalgam of sentential, graphic and pictorial posts—was slightly given attention. Slight attention was given because the dissection of the syntactic features of the entire posting was carried out in conjunction with meaning, the relationship of the semantics of the posts. The syntactic component of the emoticons being placed side by side likewise was analyzed.

In the analysis carried out for each and every posting, coding had to be done. Thereupon the initial coding, another coding had to be executed where related analyzed posts were put together. Subsequently, the initial categorizing from the codes had to be carried out, and whenever another categorizing was deemed necessary, it was carried out. After all the coding and categorizing, theorizing came next. Wellington (2015) explains that one of the cruxes of the qualitative data is the teasing apart or the analysis of the data. He avers that categorizing or coding units, i.e. beginning to create categories, patterns or recurring themes which can gradually be used to ‘make sense’ of the data. He further states that the attempt to subsume subsequent units of data under these provisional categories, or, if units do not fit, then developing new categories in which they can find a home. Wellington further purports that in analyzing data, then in reporting and publishing it, it is important never to claim too much, or “overclaim’ as some call it. In other words, limit (but not over-apologetically) the claims you make about your research. Barbour (2014) explicates that it is possible, even desirable to derive theoretical propositions and frameworks from the raw data generated in qualitative research encounters. This insinuates that the researcher should be attentive to the ideas and terms invoked by respondents and that s/he can draw on their conceptual frameworks in developing explanations.

3 Results and Discussions

3.1 The semantic roles of the subject (grammatical function) of the posts

The numbers in Table 2 represent the number of times where the grammatical element had which semantic role. *Implied* pertains to the implied ‘you’ in a post or the understood subject that is not necessarily the pronoun ‘you.’ *1st per pro* refers to the first person pronoun: *pl* for plural ‘we,’ and *sing* ‘I.’ *2nd per pro* pertains to the second person pronoun ‘you,’ not implied. *Noun* refers to a nouns used in the post at variance with pronouns. The *3rd per pro* refers to the third person pronouns ‘she,’ ‘he,’ or ‘they.’ The non-referential ‘it’ refers to the pronoun like the one that appears in the sentence *It is raining* where the referent is unknown.

Table 2. Quantified grammatical elements of semantic roles

Semantic Role	1. Agent	2. Experiencer	3. <i>Stative(not a semantic role)</i>	4. Experiencer-stative	5. Theme
Grammatical Element					
1. Implied	8	1	4		2
2. 1 st per pro <i>sing</i>	7	2	6	3	
3. 1 st per pro <i>pl</i>	3		1		
4. 2 nd per pro	4	3	5	7	1
5. Noun	5		7		3
6. 3 rd per pro	1		6		3
7. Nonreferential 'it'/referential 'it'			4		

Only three semantic roles for the subjects figured in the postings of the learners: agent, the doer of the action which is done in volition; experiencer, the subject experiences the event in the sentence; and theme, the affected caused by the verb in the sentence.

Stative is labelled alongside the semantic roles to show that some arguments do not necessarily figure as experience. Some, though, clearly qualified as stative with the semantic role experiencer. Jurafsky and Martin (2015) believe that it has proved quite difficult to come up with a standard set of roles, and equally difficult to produce a formal definition of roles like AGENT, THEME, or INSTRUMENT. A difficulty relevant to the definition in the difficulty analyzed by Jurafsky and Martin was understandable relative to the forenamed difficulty in setting the fine line between *stative not experiencer* and *stative-experiencer*.

Among the three semantic roles that figured in the postings of the informants, agent was used by the informants mostly. It can be inferred, according to the data, that there is the active involvement of the item made to be the subject in the sentence. Most of these subjects are 'personal' subjects. Furthermore, other semantic roles did not figure, and as a researcher, it can be deduced that the subject is mostly involved in the postings. This is corroborated by the fact that most of the grammatical elements are personal pronouns including the implied ones.

The semantic role *experiencer* evinces the experiences being shared in the postings. The *stative* feature of some of the posts exudes the expressions of the state of things in the postings apart from the agency and experience that the posters post.

It can then be inferred that the other semantic roles did not figure because the involvement of the poster, his actions, experiences and state do not figure in the other thematic roles.

To more clearly explicate the findings, samples from the data are in order:

- (1) Hinde gat yo tan move on kuneste.
Neg-intensifier-aspect marker- move on-this
“I don’t move on from this.”

The subject is ‘I’ and it is the agent:

- (2) Babe, I love you!

The subject is the experiencer and this exhibits a state:

- (3) I’m not perfect.

This is clearly a state, but the concept of experiencer is relatively hard to qualify in this construction.

3.2 Other Syntactic Findings Relative to the Verb

Not indicating the other grammatical items that figured in the informants’ posting would be an utter mistake in accordance to the dictates of research. Other grammatical items like interjection, deictic items, a nominalized clause, one-word adverb, the use of the vocative case, a gerundial subject, the indefinite pronoun, the interrogative pronoun, proper noun, a one-word noun, and a subjectless clause in the Filipino language. This first category falls under *other grammatical items* apart from what was analyzed relative to thematic roles. Some *phrasal constructions* like the ‘subjectless’ fragments and some set expressions likewise figured in the postings of the informants. The third category that figured in the posts was the *just punctuations* where only punctuations were utilized alongside a photo. The last type of postings that figured in the postings of the learners was the *representations* where only acronyms and gibberish characters appeared.

Along the preceding lines, it can be inferred that the postings of some senior high school in Bunguiao National High School are not necessarily full sentences, but they also utilize other items where words and /or emoticons are expected to appear.

The following screen shot in (4) shows an interjection in the posting of one of the informants.

(4) Interjection Posting:

**3.3 Themes of the Postings***3.3.1 words, fragments, sentences, remarks and the like*

Nine themes came up in the analysis of the first type of postings. These nine themes were further categorized for their relationships and furthermore for their differences from each other. The first main category is the EMOTIVE category (5) where the postings involved the emotions or feelings in the posts. Some of the posts were purely about emotions; some were about boyfriend-girlfriend things that also involved emotions; others were greetings and farewells; others were self-expressions through songs, and some about their faith, which I believe also involves emotions. The second main category which I call the COGNITIVE category (6) involves the use of the mind. The first of this kind were the ones that had something to do with just thinking or the expression of thoughts. The others were descriptive in nature where thinking has to be involved in posting and reading these posts. There are those that are only for the sake of expressing oneself—the so-called *just saying*—and there are those that talked about wisdom. The last and final category for this typology of postings is the PHYSICAL category (7) where the informants appeared to have posted materials that seem to exhibit action in their meaning.

The following items are lifted from some of the informants' posts:

- (5) Emotive
e.g. HISSHHH!

This posting exuded anger or disgust. Alongside this post is an angry emoticon.

- (6) Cognitive
e.g. If you are WORRYING it simply means you CARE !!

This post was analyzed as one that expresses a thought for one to ponder or simply think about. The process of thinking, in this analysis, is done both by the poster and the reader of the posted material.

- (7) Physical
e. g. Panoorin nyo.. laugh trip !!

This appears to be an invitation or an instruction. This type of post was analyzed under the category of PHYSICAL because the meaning seem to evince an action.

3.3.2 *Photos*

From the initial six categories, three categories were used in the analysis of the themes of the photos posted by the SHS student-informants. The first theme found in the analyses of the photos is called *FOR YOUR EYES ONLY* (8). This is called this way because the photos of this kind require the act of *looking* at the photos as they are selfies, groupies, and other photos of other things or objects like houses, paper works and the like. The second theme for the photos is the one that is called *FOR READING* (9) where the photos had words in them and they are deemed descriptive: descriptions like instructional or vulgar. The third theme that was analyzed in the photos posted were the ones called *BEYOND READING AND LOOKING* (10) where the photos had deep emotions, positive and negative alike. Posts under this category may have words, but the emotions that they exhibit qualify them to be analyzed in this category. Photos that seemed to require action in their meanings like celebration were analyzed as being in this category in that to understand meanings like the ones that seem to exhibit action in their meaning.

The following screenshots can facilitate the foregoing discussions:

- (8) For Your Eyes Only:



- (9) For Reading:



- (10) Beyond Reading and Looking:



3.3.3 Emoticons/smiley

The analyses done for the emoticons/smiley generated five themes namely (1) *POSITIVE EMOTIONS*, (2) *NEGATIVE EMOTIONS*, (3) *RESEMBLANCE OF REAL OBJECTS*, (4) *ACTIVE* and (5) *SIGNS FOR SOMETHING ELSE*. In the name of the theme alone, it can be expected that some emoticons utilized are those that evinced positive emotions, e.g. *smiling emoticons, laughter, very big smile, love*; the second, negative emotions, e.g. *broken heartedness, weeping, sadness, disgust, worry, big eyes and small eyes for crazy* (as indicated in the post) an etc. The third are those that are symbols of the real objects, e.g. *money, gun, strong arm, bomb, ackes with candles, flight, boats, water and waves*. The fourth one are the ones that are considered to be active in that they do not just smile but they seem to act in other ways or have acted in other ways apart from smiling, e.g. *messy smiley because of careless eating, party, celebration, travel, kiss, prayer, etc.* The last theme is the one that are representatives for something else, e.g. *peace symbol, heart in place of a verb, smileys with medical masks, snake for double-crossing*.

One feature of emoticon use was to use it in place of a word, e.g. verb for *I love you*. The heart was used in place of the verb love in the sentence. Other graphic figures that appear alongside the emoticons or smileys are counted as emoticons or smileys.

3.3.3 Videos

The fewest materials drawn upon in the postings were the videos. All the videos posted were analyzed as *EMOTIVE*. Music, movies (heavy dramatic), fun, love and sadness were the themes that came up. All these express emotions.

4 Overall Findings & Conclusions

The syntax of the different materials in the posts: WSFR (words, sentences, fragments, remarks, etc.), photos, emoticons and videos all appeared to have *contents* like content words. The functions of the varied functors in a communicative language all seem to appear only in the brain of the reader of the posts. Precisely identical case can be observed in the relationships of the different emoticons used together or used in one posting though not exactly together.

The final analysis done for the postings was the analysis for the entire posts as whole entities. The posts carried a lot of emotions and that is understandable due to the fact that humans are beings replete with emotions. A corroboration can be drawn from the *stative* posts of the informants. Some of the posts were very expressive, and with this an inference that posts are used to disgorge expressions, thoughtful or emotional ones. Some posts suggested some physical activity or actions (kiss, prayer), and this is corroborated with the use of the semantic role agent in some of the subjects and the semantic role experiencer.

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