JAPANESE NOUN PHRASE ON TWITTER TRENDING TOPICS

Oleh:

Gede Satya Hermawan
Universitas Pendidikan Ganesha
satya.hermawan@undiksha.ac.id

Abstract

This paper discussed a Japanese noun phrase as hashtag Twitter. The research was conducted by collecting data for 1 month in September 2022. The data is not limited to a single chunky noun phrase, but noun phrases as constituents are also discussed in this paper. The descriptive qualitative method will describe the meaning of the phrase, and syntax will be used to identify the structure. The results reflect the used noun phrased as a hashtag, created simply as structure, but complex as semantically. The single hashtag has a discourse meaning behind it. Other than that, founded a treatment spoken language as writing text, and the users naturally find the meaning behind of it. This kind of situation indicates a premature sign of spoken language can fully understand without syntax marker on it (the spoken language always pragmatically helped by gesture, expression, and intonation).

Kata kunci: Japanese, Noun Phrase, Trending Topics, Twitter

Artikel diterima: 15 Desember 2023
Revisi terakhir: 18 Desember 2023
Tersedia online: 23 Desember 2023

A. INTRODUCTION

Twitter is a popular microblogging service (Ficamos & Liu, 2016, p. 201; Lau et al., 2012, p. 1520; Lee et al., 2011, p. 251; Mathioudakis & Koudas, 2010, p. 1155; Naaman et al., 2011, p. 903; Rathod & Barot, 2017, p. 129). In a day, about 6 million tweets are posted (Mathioudakis & Koudas, 2010, p. 1155). Twitter always reported events at that time, on the spot, with tweets sharing events in the world or just a user's life. Twitter users can monitor events or occurrences and can also messages are called tweets (Ficamos & Liu, 2016, p. 201; Lee et al., 2011, p. 251; Naaman et al., 2011, p. 903; Rathod & Barot, 2017, p. 129).
understand people's feelings. The reason is that Twitter allows users to disseminate and share information (Ficamos & Liu, 2016, p. 201; Mathioudakis & Koudas, 2010, p. 1155; Naaman et al., 2011, p. 903).

Then, information sharing happens, and some topics are most frequently tweeted. This list of topics that are currently trending, and have the greatest number of tweets, is called trending topics. This trend shows what a group of users is talking about and the opinions of that group on a particular topic. Trending topics consist of short phrases, keywords, and hashtags. To find out trending topics, there must be real-time data. Handling real-time data is a complex task in information retrieval (Lau et al., 2012, p. 1520; Lee et al., 2011, p. 251; Mathioudakis & Koudas, 2010, p. 1155; Naaman et al., 2011, p. 905; Rathod & Barot, 2017, p. 129). Topics contain different types of singular words, such as nouns, adjectives, and verbs, or phrases such as noun phrases, verb phrases, and adjective phrases. This paper will discuss noun phrases as topics, limited to trending topics.

Noun phrases themselves have some references in it. Reference in Japanese noun phrases depends largely on discourse context, with prior mention of an object and all the properties that can be inferred from it, as well as knowledge of the world as an indicator of definite reference. Each noun phrase whose referent cannot be retrieved from the discourse context will in turn be considered indefinite. Nonetheless, noun phrases can also be marked explicitly for their certainty, thereby forcing the interpretation of their referents to be independent of discourse context. In this way, it is possible to trigger the accommodation of previously unknown specific references or obtain unlimited readings even if objects of the same type have been introduced (Heine, 1998).

Looking at the noun level, the lexical properties of the noun or one of its direct modifiers can determine the reference of the noun in question. There are some nouns, which can be marked as definite words based on their lexical nature alone, either because they refer to a unique reference in the world of discourse, or because they carry some sort of indexical implication. Such references are uniquely explained with respect to some of the implicitly mentioned contexts (Heine, 1998).

Moreover, from the Twitter trending topic in September 2022, there are 21 related noun phrases found. A noun phrase has 16 data, the comparative case
has 2 data, and a noun phrase as a sentence constituent or predicative phrase constituent has 3 data. These data will be discussed using syntax and semantics to find out the structure of the phrases, and the meanings related to the corpus.

Japanese nouns are divided into four types, namely nouns (hutûmeisi), proper names (koyûmeisi), pronouns (daimeisi), and numerals (sûsimeisi). The hutûmeisi or noun or regular noun is a noun that refers to a particular thing, such as: hon (book), enpitu (pencil), shinbun (newspaper), and others. The koyûmeisi is a noun that refers to a place name, a person name, a country name, and other name. The example like Tokyo refers to a place name, or Yamada refers to a person name, etc. Then, the daimeisi is a noun is a noun used to replace the name of an object. There are two types of daimeisi, first one is ninsyou daimeisi (personal pronouns); and the second one is sizi daimeisi (demonstrative pronouns). The Japanese personal pronouns, such as watasi, anata, karera, etc; and the Japanese demonstrative pronouns, such as kore, kono, asoko, etc. Last, the sûsimeisi is a noun that refers to numbers or counting a number, such as san (three), hitori (one person), hyaku (one hundred), and others (Takayuki, 1993).

A phrase is said to be a noun phrase if its main word is a noun. Noun phrases are elements that can fill in the subject, object, and complement (description) in a clause. The noun phrase here can be a combination of two or more words, or just one word. Noun phrases can occupy the function of subject, object, and complement (adverb) in a sentence. (Syartanti, 2016).

Next, discuss noun phrases and clauses. Rosliana's research (2015) provides an overview of the differences between clauses and noun phrases. Rosliana (2015) uses the rationale of Tokieda (1982) and Shibatani (1998), showing that there is a fine line between noun phrases and clauses. According to Shibatani (1988 in Rosliana, 2015) the use of the particle 'no' to combine two nouns is a clause, not a noun phrase. Noun phrases can be used when an adjective is used to describe a noun. On the other hand, Tokieda (1982 in Rosliana, 2015) includes the use of the particle 'no' as a noun phrase. In this discussion, looking at the current developments in Japanese linguistics, Tsujimura (2007) includes the particle 'no' as a noun phrase, because there is no predicative element in it. The clause will occur if there is a predicative element in it. The use of the particle 'no' shows a modification of the noun.
The interrelationships of modifier clauses and modified nouns range from very distant to very close, and hypotheses based on this spatial dimension can also be applied to other dimensions: time and cause and effect relationships. Extensibility is determined by various factors such as case, tense/aspect system, aspect character of nouns, conjunctions, and the speaker’s worldview. These factors can affect extensibility both in terms of modifier clauses and modified nouns (Nakayasu, 1999).

The noun phrase (NP) of Japanese language had a pattern in the process of attaching nouns (N1) to other nouns (N2), the particle no (genitive) is used. As exemplified below.

1. **Nihongo-no hon**
   Japanese-Gen book
   “Japanese Book”

2. **Supôtu-no zassi**
   Sport-Gen magazine
   “sport magazine”

3. **Asita-no asa**
   Tomorrow-Gen morning
   “tomorrow morning”

According to Tsujimura (2007), N2 is modified by N1. Example 1, the N2 hon is modified by N1 nihongo. The same process occurs in the other example, zassi modified by supôtu, and asa modified by asita. Then the noun phrase becomes as below.

(NP(N1 no)(N2)))

Not (NP(N1)(noN2)))

Related to this kind of system, Tjandra (2014) said in the realness Japanese doesn’t have noun phrase concepts. Even though Japanese linguistic had the term *meisiku* (noun phrase), that term is a literal translation from western linguistic term. The origin of the noun phrase Japanese is *bunsetu*. The *bunsetu* is a ‘sentence segment’ as Tjandra (2014) said. Like *nihongo-no hon* had 2 *bunsetu*; [nihongo-no] and [hon]. The difference is clear in the sentence (S) below.

4. **Tarôkun-wa terebi-o mimasu**
   Tarôkun-Top television-Acc watch
   “Taro-kun watch television”

   (a) (S(NP wa)(VP(NP o)(V)))
   (S(Tarôkun-wa)(VP(terebi-o)(mimasu))))

   (b) (Tarôkun-wa), (terebi-o), (mimasu)

As syntax, sentence number 4, consists of NP and VP –verb phrase- (a) with verb mimasu (V) explained by noun terebi-o (object attached to accusative case particle), but as a *bunsetu* there is 3 *bunsetu* (b).

Thus, this study will discuss the use of noun phrases in trending topics on Twitter, emphasizing structure and meaning

**B. RESEARCH METHODOLOGY**

1. **Research Method**

   The research method used is qualitative. Data will be analyzed and described.

2. **Time of Research**

3. **Object of Research**

The subject of this research is the topic and hashtag on a trending topic in September 2022. Then, the object is a noun phrase on the topic and hashtag. Those topics and hashtags analyzed, and described by descriptive method. The topic of the tweets used is believed to be material that can be used freely, by complying with the principle of anonymity.

4. **Technique of Data Collection**

Tweets containing a noun phrase on the topic and hashtag will be screen-captured and saved to the drive. Data collection was carried out within a week. Tweets containing a noun phrase on the topic and hashtag will be entered into a data card to continue with the analysis.

5. **Technique of Data Analysis**

The data was analyzed using a syntactic approach to determine the structure that forms it, and a semantic approach to determine the meaning, both lexical and grammatical.

6. **Research Instrument**

Data is collected by using the snipping tool to capture the screen. Then data cards, for data collection.

**C. RESULT AND DISCUSSION**

**The Noun Modifier**

Most data (17 NP) show noun phrases with the modifier being nouns as well. The genitive particle *no* is used in the data found. As follows.

5. *Tuka-no ma-no Itika*
   Bundle-Gen space-Gen Itika (name a person)
   “short time of Ichika”

6. *Kamakura dono-no zuyosannin*
   Kamakura dono-Gen thirteen people
   “thirteen people at Kamakura”

7. *Suzume-no tozimari*
   Suzume-Gen door lock
   “lock the door, Suzume”

Numbers 5 until 7 are the title of movies or Japanese anime or drama series. The promotion of programs belonging to the agenda made these titles become a trending topic on Twitter. Noun phrase number 5 is a title from a Japanese television drama. The modifier of the noun phrase is *tuka-no ma*, and it modified the noun *itika*. The phrase *tuka-no ma* is an idiomatic phrase that can’t be a small part (as a single word) and the meaning is a short time, then *itika* itself is a reference to a person's name. So, the possible structure from the number 5 noun phrase is (c) not (d).
It differs from Tsujimura (2007) description of two possibilities meaning reference from the noun phrase "akai hon-no hyōsi". The structure can be had meaning a red book with a cover (like (e)) or a book with a red cover (like (f)). At (e) figured NP build by AP (adjective phrase, in the example without adverbial it become adjective only) and NP, with AP as modifier. From Tsujimura (2007), this kind of concept is called structural ambiguity.

8. Akai hon-no hyōsi
   Red book-gen cover
   “red book cover” (Tsujimura, 2007, p. 207)

   (e) (NP(NP(Akai hon no) (hyōsi))))
   (f) (NP(AP(Akai)NP(hon no)(hyōsi))))

Number 6 is the title of a historical base television drama story. The Kamakura represents a place and historical era in Japan. Then, the dono is a suffix attached to a person's name to show respect or attached to a place name as an honorific title for a mansion located there or giving honor to those who live in that place. The noun phrase structure (g) explains zyūsannin modified by noun Kamakura dono. Associated with the number 6, number 7 has the same structure (h) which the noun tozimari was modified by Suzume. The phrase Suzume no tozimari is an anime title, with Suzume as the name of a character.

   (g) (NP(kamakura dono-no)(zyūsannin))))
   (h) (NP(Suzume-no)(tozimari)))

The base structure (c), (g), and (h) are (NP(NP no)(N))) with also refer to noun modified other noun, but the Japanese noun phrase structure not only one but there is also another structure. The other, NP uses the AP as a modifier, the structure is (NP(AP(Adv)(A)(N))))). The AP focuses on an adjective (A) modified by adverb (Adv). The example like below.

9. Totemo akai hon
   Very red book
   “very red book” (Tsujimura, 2007, p. 208)

   The structure becomes (NP(AP(totemo)(akai)(hon)))), adverb totemo explains the adjective akai, and the adjective phrase totemo akai modified the noun hon.

The next classification is a topic about events of a day. Celebrating an event on that day can be a trending topic. Found three data related to these topics.

10. Gumi-no hi
    Gummy-Gen day
    “gummy day”

11. Keirō-no hi
    Respect old people-Gen day
    “respect for the aged day”

12. Syūbun-no hi
    Autumnal equinox-Gen day
    “autumnal equinox day”

Three data to indicate the noun hi modified by another noun; gumi, keirō, and syūbun. Gumi no hi refers to a day
love a gummy. Created by Gummit, an organization of Japanese gummy manufacturers. Celebrate on September 3 (Gummit, n.d.).

*Keirô no hi* is the day to give honor to the elderly citizens and is held every September 15. Then, *syûbun no hi* held around September 23, is a public holiday in Japan and a nice day because of the end of summer and then the start of autumn. All three data reflect the NP structure. The other NP (11 data) had an identical structure.

**The Comparative Particle**

Other than 17 NP, on the topics found 2 data related to the noun, it is a comparative particle. In the Japanese language used case particle *yori* for comparing two things. The comparative construction had two types complement (Comp): phrasal comparative and clausal comparative (Sawada, 2008; Sudo, 2015).

Example gives below.

13. *John-*wa *Mary-*yori kasikoi
   
   John-*Top Mary-than smart
   
   “John is smarter than Mary” (Sudo, 2015, p. 4)

14. *John-*wa *Mary-*ga *kitaista-yori kasikoi
   
   John-*Top Mary-Nom expected-than smart
   
   “John is smarter than Mary expected” (Sudo, 2015, p. 4)

Sudo (2015) explained the difference between numbers 13 and 14 in the type of complement, at example 13 the complement is a single phrase or is called a determiner phrase (DP), and in example 14 the complement is a clause phrase (*S’*). Then, the differences in structure:

(i) (S(NP wa)(Comp(DP) yori)(VP)))

(j) (S(NP wa)(Comp(S’ ) yori)(VP)))

A more complicated clause-phrase structure is possible by adding another Comp becomes S’1, S’2, S’3, and more (Kurafuji, 2011).

Looking at the explanation of Japanese comparative sentences in the previous paragraph, the topic found from the Twitter data is a single phrase or DP. The data shows a different structure, which looks like a choices structure other than a comparative structure. The reason is that Twitter topics require short phrases and the tweet itself explains the purpose or meaning of the topic.

Data numbers 15 and 16 express a comparison of two nouns. These two data as a topic on Twitter are related to each other. The trigger topic is Prime Minister Shinzo Abe's funeral cost. In early September a hashtag trended on Twitter about ahead of the state funeral of former Prime Minister Shinzo Abe on the 27th of September 2022, because on September 6 had information to the public that the total cost of Mr. Abe's state funeral would be about 1.66 billion yen, and criticism increased. Related to this topic another
topic raising up to reduce criticism, is the amount of public assistance for foreigners is said to be 120 billion yen a year. The public compared these two topics, which one is better, and made hashtag #kokusôhantai-yorigaikuzinseikatuaho hantai become a trend (Mainichi Shinbun, 2022).

Then, another topic is coming up, from the 23rd of September night until the 24th of September morning record heavy rain fell in the Shizuoka Prefecture. This typhoon caused people to suffer damage such as water outages. About 63,000 households in Shimizu Ward, Shizuoka City, have had their water supply cut off, and on the 26th, people requested the Self-Defense Forces to dispatch victims. Many residents sent sad tweets, and soon the phrase “relief in Shizuoka rather than a state funeral” with hashtag #kokusôyorimosizuku kakyûsai became a trending topic. As of 16:00 on the 26th, it is still in the ranking along with “disaster dispatch request” (Nikkan Gendai, 2022).

The discourse meaning in the previous paragraph reflects the meaning behind the topic. Thus, the structure of comparative sentences is not like this structure (S(NP1)yori)(NP2)) because there is a null predicate. If the predicate attaches to the topic such as kokusôhantai-yori gaikuzin seikatuaho hantai [ga yoi] -it is better to oppose public welfare for foreigners than to oppose state funerals- or other, that make a perfect comparative sentence. The structure is below.

\[(k)\ ((S(NP\ wa) (Comp(DP)yori)(VP(0))))
\((S(\text{gaikuzinseikatuaho hantai} wa) (\text{Comp(kokusôhantai} yori)(VP(0))))
\((S(\text{Comp(kokusôhantai} yori) gaikuzinseikatuaho hantai (ga O))(VP(0))))\]

At data (k), there was a scrambling, the topic sentence moves to the middle sentence, then the topic marker wa became ga, but without a predicate, particle ga become null. This phenomenon naturally happens in the Japanese language. Took Sudo’s (2015) example, which can be scrambled to become, Mary-yori John-ga kasikoi, without a different meaning. Another note from number 16, is particle yori and mo. These two particles combined (yorimo) for emphasize something, for data number 16 emphasizes relief from Shizuoka more concern other than a state funeral.

The Constituents

The last data will discuss are noun phrase as contituens, there are three data found as below.

17. Nitori-no gêmingutiea hosì
Nitori-Gen gaming chair want
“(I) want gaming chair Nitori”

18. Anata-no Sakurai Takahiro-wa doko-kara
You-Gen Sakurai Takahiro-Top from where
“where is your Takahiro Sakurai from?”

19. Saigo-no saigo-made kokusô-ni hantaisimassuu
Last-Gen last-until state funeral-to oppose
“until the very end. I will oppose the state funeral”
Data 17 is a structure of an adjective predicate sentence. The structure focuses on the adjective predicate hosî with NP as an object. Actually, there is a null nominative particle ga. The number 17 sentence attached with nominative particle becomes: nitori no gêmingutiea (ga) hosî. Particle ga functions as an argument of the predicate, and the NP bound by particle ga becomes the subject of the sentence. So, the NP nitori no gêmingutiea is the subject of sentence, even though the ga is null. The noun nitori is a brand of the chair and a modifier of the noun gêmingutiea.

In Japanese, there is a copula verb. This verb has a spoken language version in the form desu, and a written language version is de aru. The term copula means connecting, meaning that this verb grammatically connects a subject with a predicate noun. Adjectives in Japanese can also function as predicates, like hosî in data 17. When this kind of adjective becomes predicates, they don't need a copula. But there are also nouns adjectives, such as kirei (pretty), benri (practical), and so on. This adjective requires a copula like a predicate noun requirement (Tjandra, 2014).

Some sentences in Japanese have two subjects. One subject is the main topic in the whole sentence, and the particle wa has this position. Then the other is a complement in the sentence, and ga has this position. The restriction of a topic by was loose because of its function of presenting the overall theme. The method of limitation in both time and distance of the particle ga is one that strives for more clarity, the sphere of limitation taken by ga is narrower than that of wa (Hideichi, 1973). On data 17, the structure is recommended on syntax like below.

20. Watasi-wa nitori-no gêmingutiea ga hosî-desu
I-Top nitori-Gen gaming chair-Nom want-Cop
“I want gaming chair Nitori”

The topic can be erased if the subject is clear, then particle ga becomes null because the predicate doesn’t need subject mark because on that sentence (17) only have one subject.

Next, data 18 goes to Sakurai Takahiro, a famous Japanese voice actor, narrator, and radio personality. In numerous anime, he has played as a voice actor, such as Tentomon in Digimon Adventure (1999), Kira Idiru in Bleach (2005), Sasori in Naruto (2007), and others. The hashtag related to his program radio P.S Genki shut down after 9 years of airing (Yoshinori, 2022). The fans are very sad to hear the information because a lot of memories draw from the program. Takahiro asked the fans to talk about their memories of the program, but the hashtag is not limited to the program, it is all about the work done by Takahiro. The fans
tweeted which program or animation they first knew about Takahiro. The NP *anata no sakurai takahiro* is the topic of the sentence, and the postposition phrase (PP) *doko kara* becomes a comment on the sentence. The sentence structure is a topic-comment structure.

A postposition is placed in a noun setting or noun phrase. A postposition cannot be a separate clause, a postposition looking up a noun-postposition sequence. This is because postposition requires certainty of meaning. If it is not placed in a sentence, the exact meaning will not be known, so a conjugation pattern is needed. But this is also used to replace the specific predicate in the previous sentence. So that the postposition is only a constituent in a sentence and cannot stand alone (Tsujimura, 2007).

It is happening with PP *doko kara*, it becomes a constituent of the sentence. In cases on data 18, even though the PP was a constituent, the predicate itself is null. Data 18 is a question sentence and needs question marker *ka* (like data 19). But, for spoken language, it can be replaced by high intonation at the end utterance. So, the data 18 as hashtag are treated like spoken language, and all tweeters understand the uses of hashtag naturally.

Last, the meaning of data 19 about state funerals is related to data 15 and 16. The main point of the structure is the postposition phrase that was built by NP and *made*. The postposition made gives information about the degree of limitation, on data the information is `until the very end`. This information explained the following clause predicative *kokusō-ni hantaisimasu* and the clause itself becomes the main topic of the sentence. The structure is verb phrase structure. The structure of data 17-19 is shown below.

```
(l) (S(NP 0)(VP(NP)(A-V))))
(m) (S(NP 0)(VP(NP)(A-V))))
(n) (S(NP 0)(VP(NP)(A-V))))
```

The three structure shows Japanese predicative sentence, with the topic built by NP and *wa*, then comment built by NP and VP. There are two PP, first, *kara* means a beginning, and second, *made* means ending, thus two PP shows limitation.

D. CONCLUSION, IMPLICATION, AND RECOMMENDATION

1. Conclusion

Analyzing 21 data, it was found that the noun phrases used were nouns that explained other nouns. No adjective explains the noun. Judging from its function in a sentence, noun phrases act as adverbs, topic sentences, or explanations of predicative clauses. In
the Twitter hashtag in the predicative sentence, there is a null of the nominative particle because the hashtag should be a short phrase.

2. Implication
The discussion had impact of the grammatical structure of Japanese Noun Phrase.

1) (NP(NP(N1 no) (N2 no))(N3)))
2) (S(NP wa)(Comp(DP yori)(VP))))
3) (S(NP wa)(Comp(S') yori)(VP))))
4) (S(NP Ø)(VP(NP)(A-V))))
5) (S(NP wa)(VP(PP)(VØ))))
6) (VP(PP)(NP ni(V))))

3. Recomendation
Other than hashtag, the data can be found on tweet it self. For other research and discussion can be analysis of noun phrase on tweet.

REFERENCES


Nikkan Gendai. (2022, September 26). 「国葬よりも静岡救済」がトレンド入り 岸田総理は9.25夕方『散髪したってよ』と批判殺到 | 日刊ゲンダイ


Takayuki, T. (1993). 教授法マニュアル70例下 (kyōzyuhô manyuaru 70rei). Bojinsa,

