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Disney's Hit K-Drama Moving: A Big Data Analysis

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Abstract
This paper aims to analyze 27 articles of Google written in 2023 regarding Disney's hit K-drama *Moving*. A point to note is that one noun obtained the highest use (670 tokens) and the highest proportion (0.51). A further point to note is that the word cloud representing 27 articles shows that the noun *Disney* turned up as the biggest. This amounts to saying that the word *Disney* played a pivotal role in 27 articles of Google. With respect to the frequency of 20 topics, it is worthwhile pointing out that topic 17 was the most widely used in 27 articles, followed by topic 10, topic 11, and topic 5, in that order. A major point of this paper is that topic 17, topic 2, topic 12, topic 1, topic 6, and topic 15 have a commonality. That is to say, they have the keyword *series* in common, hence implying that it is regarded as central. When it comes to key words that showed up in 27 articles, the noun *series* was the most widely used, followed by the noun *Disney*, the noun *story*, the noun *episode*, the noun *character*, and the noun *ability*, in descending order. Finally, this paper argues that the word *series* has the highest centrality, followed by the word *Disney*, the word *Moving*, and the word *drama*, in that order.
Keywords: Moving, Disney, topic, token, big data, centrality

1. Introduction

The main purpose of this paper is to provide an in-depth analysis of 27 articles of Google written in 2023 regarding Disney's hit K-drama *Moving*. In this paper, we analyzed 27 articles of Google in terms of the software package NetMiner. First, we aim at providing information on the use of nouns that occurred in 27 articles of Google including the proportion and cumulative proportion of nouns. Second, we aim to go over the so-called word cloud of 27 articles in which central words occur in different fonts. We can see which words function as central in 27 articles of Google. Third, we attempt to probe into 20 topics that showed up in 27 articles of Google and their keywords. Also, we aim to inquire into the use of 20 topics that appeared in 27 articles of Google through which we can see which topics are the preferable ones for authors. Attention is also paid to the map of 20 topics in which key words are linked to each topic. Fourth, we aim at looking into the use of pivotal words that turned up in 27 articles. We can observe which words are central in 27 articles of Google since pivotal words occur in descending order. Finally, we attempt to probe into Eigenvector centrality and provide its map. The so-called Eigenvector centrality indicates that if a node (a word) is linked to many neighbors, then the node (the word) has higher centrality. Simply put, Eigenvector centrality indicates global centrality.

2. Results

2.1. Information on nouns

This section is devoted to examining the distribution of nouns that appeared in 27 articles of Google including their proportion. Table 1 shows the distribution of nouns that occurred in 27 articles of Google:

Table 1: Information on Nouns

Value	Frequency	Proportion	Cumulative Proportion
1.0	670	0.51	0.51
2.0	223	0.17	0.68
3.0	111	0.084	0.764
4.0	66	0.05	0.814

5.0	33	0.025	0.839
6.0	36	0.027	0.867
7.0	34	0.026	0.893
8.0	24	0.018	0.911
9.0	16	0.012	0.923
10.0	8	0.006	0.929
11.0	9	0.007	0.936
12.0	8	0.006	0.942
13.0	4	0.003	0.945
14.0	7	0.005	0.951
15.0	3	0.002	0.953
16.0	7	0.005	0.958
17.0	7	0.005	0.963
18.0	8	0.006	0.97
19.0	2	0.002	0.971
20.0	2	0.002	0.973
21.0	4	0.003	0.976
22.0	1	0.001	0.976
24.0	6	0.005	0.981
25.0	1	0.001	0.982
26.0	1	0.001	0.982
28.0	4	0.003	0.986
31.0	1	0.001	0.986
32.0	2	0.002	0.988
34.0	2	0.002	0.989
36.0	1	0.001	0.99
37.0	2	0.002	0.992
40.0	1	0.001	0.992
44.0	1	0.001	0.993
50.0	3	0.002	0.995
51.0	1	0.001	0.996
56.0	1	0.001	0.997
61.0	1	0.001	0.998
68.0	1	0.001	0.998
82.0	1	0.001	0.999
107.0	1	0.001	1
Total	1314	1	

It is vital that one noun occurred 670 times in 27 articles of Google. This in turn indicates that this word obtained the highest use (670 tokens) and the highest proportion (0.51). It is quite interesting to mention that one noun is followed by two nouns, as illustrated in Table 1. More specifically, two nouns turned up 223 times in 27 articles of Google. As indicated in Table 1, their frequency is the second highest (223 tokens). It is interesting to consider three nouns. Quite interestingly, their use is 111 tokens (the third highest). Simply put, they occurred 111 times in 27 articles of Google. It is worthwhile to include four nouns. They showede up 66 times in 27 articles (66 tokens). It must be stressed that the use of five nouns is 33 tokens. That is to say, they occurred 33 times in 27 articles of Google. We thus conclude that there occurred one noun whose use is 670 tokens in 27 articles of Google.

Now take a look at Table 2. It shows the distribution of names that occurred in 27 articles:

Table 2: Distribution of Names

Value	Frequency	Proportion	Cumulative Proportion
-	1162	0.884	0.884
Geographical Name	24	0.018	0.903
Organization Name	41	0.031	0.934
Personal Name	87	0.066	1
Total	1314	1	

It is important to mention that the frequency of geographical names is 24 tokens. To be more specific, they turned up 24 times in 27 articles of Google. It must be noted that the use of organization names is 41 tokens. That is to say, they occurred 41 times in 27 articles. It must be pointed out that the use of personal names is 87 tokens. This in turn suggests that they showed up 87 times in 27 articles. Most importantly, the rest of names occurred 1,162 times in 27 articles. To sum up, the overall use of names is 1,314 tokens, which in turn indicates that they occurred 1,314 times in 27 articles of Google.

Now attention is paid to Table 3

Table 3: Distribution of Common Nouns and Proper Nouns

Value	Frequency	Proportion	Cumulative Proportion
Common Noun	790	0.601	0.601
Proper Noun	524	0.399	1
Total	1,314	1	

It is worth noticing that the distribution of common nouns is 790 tokens. More specifically, they turned up 790 times in 27 articles of Google. The proportion and cumulative proportion of common nouns are 0.601. Noteworthy is that the distribution of proper nouns is 524 tokens. That is, they appeared 524 times in 27 articles. It is worthwhile noting that the overall use of two nouns is 1,314 tokens. This in turn indicates that two nouns occurred 1,314 times in 27 articles of Google. We thus conclude that common nouns turned up 790 times (790 tokens), which account for 60.1%.

2.2. A Word Cloud

This section is focused on contemplating the word cloud of 27 articles. The following word cloud shows the picture of which nouns are more central and pivotal. These nouns occur in different fonts, depending on the degree of the importance of each noun:

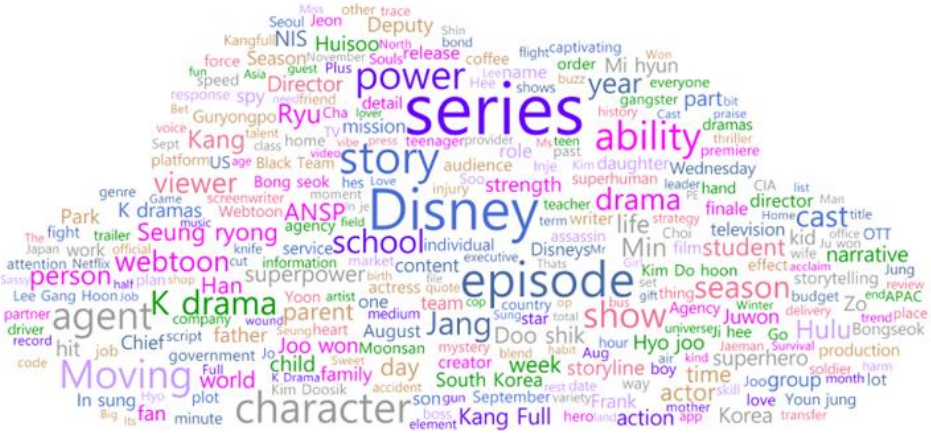

Figure 1: A Word Cloud

It is worthwhile saying that the noun *Disney* showed up as the biggest. This amounts to saying that the word *Disney* played a pivotal role in 27 articles of Google. It must be emphasized that the word *Disney* is followed by the noun *series*, as shown in Figure 1. More specifically, the noun *series* turned up as the second biggest, hence being regarded as the second most pivotal. It would be unfair not to mention that the noun *Moving* showed up as the third biggest. It therefore seems evident that the word *Moving* played a big role in 27 articles of Google. It is worth noting that the word *Moving* is followed by the noun *episode*. The noun *episode* is the fourth biggest, thus being regarded as kind of pivotal. It must be said that the noun *character* is the fifth biggest in the word cloud. We can take that as evidence that this noun is also kind of central and pivotal in 27 articles of Google. We thus conclude that the word *Disney* of all words is the most pivotal.

2.3. 20 Topics and their keywords

In section 2.3, we aim at probing into 20 topics that were widely used in 27 articles and their keywords. Table 4 shows 20 topics and keywords that are made up of them:

Table 4: 20 Topics and Their Keywords

	1st Keyword	2nd Keyword	3rd Keyword	4th Keyword	5th Keyword
Topic-1	character	Jang	Kang	viewer	series
Topic-2	Disney	school	agent	superpower	child
Topic-3	episode	show	viewer	series	season
Topic-4	episode	life	week	ability	cast
Topic-5	series	Disney	episode	Moving	Kang
Topic-6	story	Disney	ability	drama	school
Topic-7	storyline	hit	US	Moving	storytelling
Topic-8	show	power	season	Disney	webtoon
Topic-9	Min	Deputy	Director	power	ANSP
Topic-10	series	K-drama	day	Hulu	Moving
Topic-11	Ryu	Seung ryong	Han	Hyo joo	Zo

Topic-12	ANSP	ability	agent	K-drama	webtoon
Topic-13	year	part	agent	drama	Moving
Topic-14	ability	webtoon	agent	day	actor
Topic-15	Disney	character	power	year	ability
Topic-16	episode	power	story	Kang Full	ability
Topic-17	story	season	character	person	power
Topic-18	school	agent	season	power	Kang Full
Topic-19	Disney	Jang	series	person	character
Topic-20	episode	K-drama	agent	Moving	parent

It is significant to note that the keywords *Disney*, *school*, *agent*, *superpower*, and *child* are made up of topic 2. The first keyword in this topic is the word *Disney*, which is due to the fact that *Moving* is Disney's hit K-drama, hence the first keyword. It is particularly noteworthy that topic 6 includes the keywords *story*, *Disney*, *ability*, *drama*, and *school*. Quite interestingly, the third keyword in this topic is the word *ability*. This is due to the fact that *Moving* is a K-drama that deals with three high school students with super power and their parents. It is important to note that the keywords *ANSP*, *ability*, *agent*, *K-drama*, and *webtoon* consist of topic 12. More interestingly, the fifth keyword is the word *webtoon*. This is due to the fact that *Moving* is a Korean web series, based on the eponymous webtoon. It should be noted that topic 15 includes the keywords *Disney*, *character*, *power*, *year*, and *ability*. It is worth observing that the keywords *episode*, *K-drama*, *agent*, *Moving*, and *parent* constitute topic 20. Interestingly, the fifth keyword in this topic is the word *parent*. This may have happened because *Moving* is about three students and their parents that discover their super power.

Now attention is paid to Table 5. It shows how frequently each topic showed up in 27 articles:

Table 5 Use of each topic

	The use of each topic
Topic-1	43
Topic-2	11
Topic-3	39
Topic-4	29
Topic-5	52
Topic-6	30
Topic-7	33
Topic-8	27
Topic-9	40
Topic-10	62
Topic-11	56
Topic-12	48
Topic-13	32

Topic-14	30
Topic-15	31
Topic-16	24
Topic-17	70
Topic-18	30
Topic-19	27
Topic-20	53

It is worthwhile pointing out that topic 17 showed up 70 times in 27 articles. As exemplified in Table 4, the keywords *story*, *season*, *character*, *person*, and *power* consist of topic 17. It should be pointed out that topic 10 turned up 62 times in 27 articles. The keywords *series*, *K-drama*, *day*, *Hulu*, and *Moving* constitute topic 10. Quite interestingly, topic 11 occurred 56 times in 27 articles. Topic 11 includes the keywords *Ryu*, *Seung ryong*, *Han*, *Hyo joo*, and *Zo*. It is very interesting that topic 5 showed up 52 times in 27 articles of Google. The keywords *series*, *Disney*, *episode*, *Moving*, and *Kang* consist of topic 5, as indicated in Table 4. It therefore seems evident that topic 17 was the most occurred one, followed by topic 10, topic 11, and topic 5, in that order.

Now take a look at the map of 20 topics and their keywords:

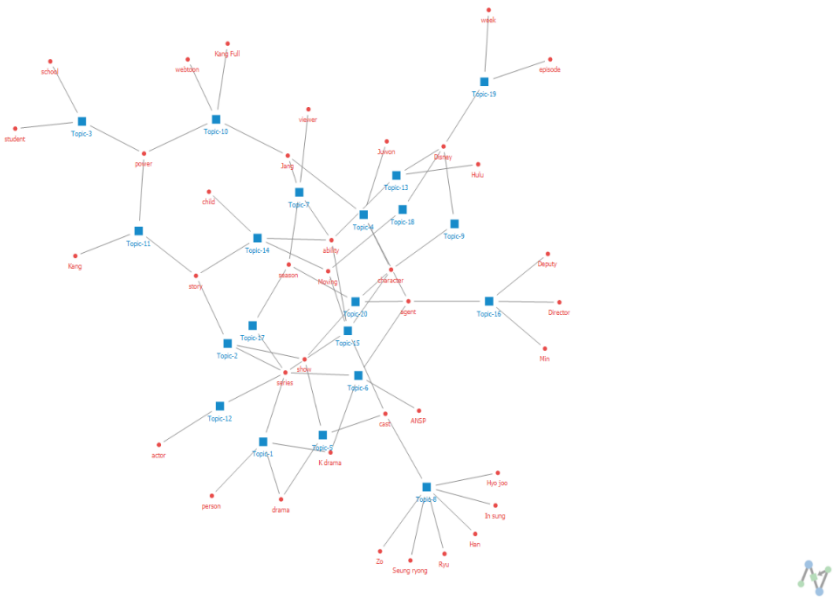

Figure 2 Map of Topics

Most importantly, the word *power* is one of the most central keywords since topic 7, topic 10, and topic 11 have the word *power* in common. It is also appropriate to mention that topic 7, topic 14, topic 13, and topic 15 have a commonality. Simply put, they have the keyword *ability* in common, thus indicating that it counts as pivotal. More interestingly, topic 17, topic 2, topic 12, topic 1, topic 6, and topic 15 also have a commonality. That is to say, they have the keyword *series* in common, hence indicating that it is regarded as central.

2.4. The frequency of key nouns

In section 2.4, we aim at exploring how frequently key nouns showed up in 27 articles of Google. Table 6 shows which nouns turned up in 27 articles:

Table 6: Frequency of Nouns

Number	Key words	Frequency
1	series	96
2	Disney	77
3	story	56
4	episode	55
5	character	52
6	ability	50
7	Moving	50
8	power	48
9	agent	48
10	show	41
11	K-drama	35
12	school	34
13	drama	33
14	cast	33
15	webtoon	32
16	Jang	32
17	viewer	31
18	season	31
19	year	29
20	Min	27
21	Hulu	27
22	person	26
23	Ryu	26
24	Kang	26
25	life	25
26	student	24
27	parent	23
28	Seung ryong	23
29	ANSP	23
30	day	22

It is significant that the noun *series* obtained the highest frequency. It showed up 96 times in 27 articles of Google. Thus, this noun counts as indispensible since it was the most occurred one. It is worthwhile saying that the noun *series* is followed by the word *Disney*. The latter is deemed to be significant since *Moving* is Disney's hit drama. That's why the frequency of the word *Disney* is the second highest. It is worth mentioning that the noun *story* turned up 56 times in 27 articles of Google. That is to say, the frequency of the noun *story* is 56 tokens and it ranks third. When it comes to the word *episode*, it ranks fourth. More specifically, it showed up 55 times in 27 articles of Google. What is interesting is that the noun *character* occurred 52 times in 27 articles, which in turn indicates that it ranks fifth. It is worthwhile noting that the noun *ability* showed up 50 times in 27 articles. This may be due to the fact that the K-drama *Moving* is about three students with super power. It seems thus appropriate to contend that the noun *series* was the most occurred one, followed by the noun *Disney*, the noun *story*, the noun *episode*, the noun *character*, and the noun *ability*, in that order.

2.5. Eigenvector Centrality

This section focuses on showing Eigenvector centrality and providing its map. Figure 2 indicates the map of Eigenvetor centrality. The term centrality refers to the so-called importance, prestige, and influence. If a node (a word) is linked to many nodes (many words), then the node (the word) counts as important, prestigeous, and influential. The term Eigenvector centrality refers to global centrality. Put differently, if a node (a word) is linked to many nodes (many words), then the node (the word) has higher centraity:

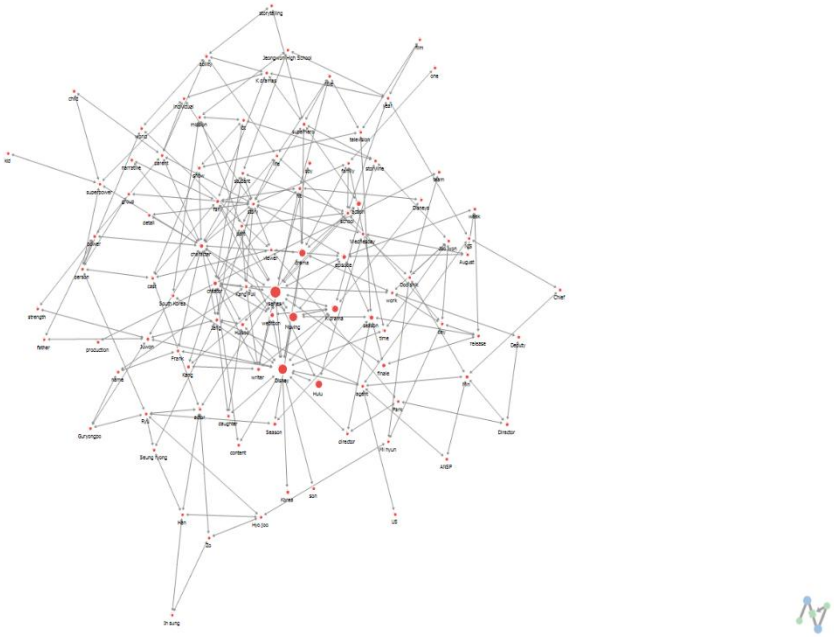

Figure 3 Eigenvector Centrality

As exemplified in Figure 3, the word *series* has the highest centrality since it has the most linked words. It therefore seems appropriate to contend that the word *series* obtained the highest Eigenvector centrality. Note that the word *series* is followed by the word *Disney*. As illustrated in Figure 3, the word *Disney* is linked to fewer words than the word *series*, hence lower Eigenvector centrality. It is worth saying that the word *Disney* is followed by the word *Moving*. As indicated in Figure 3, the latter is linked to fewer words than the word *Disney*, thus counting as less important, influential, and prestigeous. It should be stressed that the word *drama* has lower Eigenvector centrality than the word *Moving*. This is because the former is linked to fewer words than the word *Moving*, hence lower Eigenvector centrality. It therefore seems evident that the word *series* has the highest centrality, followed by the word *Disney*, the word *Moving*, and the word *drama*, in descending order. For the map of big data and similar phrases, see Kang (2023a, 2023b, 2023c, 2023d, 2023e, 2023f).

3. Conclusion

To sum up, we haveanalyzed 27 articles of Google written in 2023 regarding Disney's hit K-drama *Moving*. In section 2.1, we have provided the distribution of nouns that occurred in 27 articles of Google including the proportion and cumulative proportion of nouns. In section 2.2, we have argued that in the word cloud of 27 articles, the noun *Disney* showed up as the biggest. This amounts to saying that the word *Disney* played a pivotal role in 27 articles of Google. In section 2.3, we have further argued that topic 17 was the most widely used in 27 articles, followed by topic 10, topic 11, and topic 5, in that order. We have also maintained that topic 17, topic 2, topic 12, topic 1, topic 6, and topic 15 have a commonality. That is to say, they have the keyword *series* in common,

hence implying that it is regarded as central. In section 2.4, we have contended that the noun *series* was the most occurred one, followed by the noun *Disney*, the noun *story*, the noun *episode*, the noun *character*, and the noun *ability*, in descending order. Finally, we have shown that the word *series* has the highest centrality, followed by the word *Disney*, the word *Moving*, and the word *drama*, in that order.

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