

Reanalysis of the Mission Statements of the Medium-term Goals/Plans of National University Corporations in Japan

Soichiro Aihara *

Abstract

The Mission Statement of the latest version of the 4th Medium-term Goals and Plans of the national universities are analyzed. The purpose is to visualize the group isomorphism and uniqueness, which is the same as in previous studies. This study also supports the view that MS is substantive and realistic rather than a symbolic and ritualistic artifact in Japan.

Keywords: Medium-term Goals and Plans, Mission Statement, Text Analysis, University Evaluation.

1 Introduction

In 2004, Japanese national universities were incorporated. Since then, they have started publishing medium-term goals and plans. They also have undergone mission redefinition and functional differentiation. This study analyzes the mission statement (hereafter referred to as MS) described in the "Preamble: Fundamental Goals of the University" of the Medium-term Goals and Plans of the national universities [1]. There are previous studies analyzing the MS. In this study, the March 2023 update is analyzed. The research question of this study is whether we can obtain the same results as the previous studies. According to the review by Hashimoto (2020), there are two perspectives on MS studies [2]. One view holds that MS is a symbolic and ritualistic artifact rather than an actual presentation of "reform." This study, relying on the work of Kosmützky (2012, 2016), has a position that MS is substantive and realistic [3][4].

2 Previous Studies

There have been numerous studies on MS in recent years. Some of these studies include Japanese universities. For example, Bayrak (2020) studied MS at top-ranked universities in five world regions: Africa, Asia, Europe, Latin America, and North America. Eight Japanese universities were included in this study [5]. Manning (2021) studied the MS of world-class universities in East Asian countries, such as China, Hong Kong, Japan, Macao, South Korea, and Taiwan. This study included 37 Japanese universities that publish MS in English [6].

This study analyzes the "Preamble: Fundamental Goals of the University" of the latest version of the 4th Medium-term Goals and Plans [1]. On March 29, 2023, the MEXT published the updated version. The first version was published on March 30, 2022. Studies have already analyzed this first version [7][8]. As the title states, "Reanalysis," this study analyzes the latest data with the same framework as the previous studies. Furthermore, this study newly analyzes the designated national universities.

* Shibaura Institute of Technology, Tokyo, Japan

3 Data

Medium-term Goals and Plans of the national universities have been published on the MEXT's website [1]. Table 1 lists the universities used in the analysis. There are 75 universities and three newly established university systems. The T1 column is for universities and university systems. Universities are categorized into three types according to the support frameworks: 1. Regional-contribution type, 2. Field-specific type, 3. World-class type. From 4 to 6 are University systems. The T2 column is for designated national universities: 1. Designated national university, 2. University system which has the designated national university, 3. Other universities and university systems. Four graduate schools and four inter-university research institute corporations also published medium-term goals and plans. However, these are omitted because they don't have undergraduate programs.

Table 1: List of the National Universities Used in the Analysis

ID	University	T1	T2	ID	University (English)	T1	T2
1	Hokkaido University	3	3	40	Hamamatsu University School of Medicine	1	3
2	Hokkaido University of Education	1	3	41	Aichi University of Education	1	3
3	Muroran Institute of Technology	1	3	42	Nagoya Institute of Technology	1	3
4	Asahikawa Medical University	1	3	43	Toyohashi University of Technology	1	3
5	Hirosaki University	1	3	44	Mie University	1	3
6	Iwate University	1	3	45	Shiga University	1	3
7	Tohoku University	3	1	46	Shiga University of Medical Science	1	3
8	Miyagi University of Education	1	3	47	Kyoto University	3	1
9	Akita University	1	3	48	Kyoto University of Education	1	3
10	Yamagata University	1	3	49	Kyoto Institute of Technology	1	3
11	Fukushima University	1	3	50	Osaka University	3	1
12	Ibaraki University	1	3	51	Osaka Kyoiku University	1	3
13	University of Tsukuba	3	1	52	Hyogo University of Teacher Education	1	3
14	Tsukuba University of Technology	2	3	53	Kobe University	3	3
15	Utsunomiya University	1	3	54	Wakayama University	1	3
16	Gunma University	1	3	55	Tottori University	1	3
17	Saitama University	1	3	56	Shimane University	1	3
18	Chiba University	3	3	57	Okayama University	3	3
19	The University of Tokyo	3	1	58	Hiroshima University	3	3
20	Tokyo Medical and Dental University	2	1	59	Yamaguchi University	1	3
21	Tokyo University of Foreign Studies	2	3	60	Tokushima University	1	3
22	Tokyo Gakugei University	2	3	61	Naruto University of Education	1	3
23	Tokyo University of Agriculture and Technology	3	3	62	Kagawa University	1	3
24	Tokyo University of the Arts	2	3	63	Ehime University	1	3
25	Tokyo Institute of Technology	3	1	64	Kochi University	1	3
26	Tokyo University of Marine Science and Technology	2	3	65	University of Teacher Education Fukuoka	1	3
27	Ochanomizu University	2	3	66	Kyushu University	3	1
28	The University of Electro-Communications	2	3	67	Kyushu Institute of Technology	2	3
29	Hitotsubashi University	3	1	68	Saga University	1	3
30	Yokohama National University	1	3	69	Nagasaki University	1	3
31	Niigata University	1	3	70	Kumamoto University	1	3
32	Nagaoka University of Technology	1	3	71	Oita University	1	3
33	Joetsu University of Education	1	3	72	University of Miyazaki	1	3
34	University of Toyama	1	3	73	Kagoshima University	1	3
35	Kanazawa University	3	3	74	National Institute of Fitness and Sports in Kanoya	2	3
36	University of Fukui	1	3	75	University of the Ryukyus	1	3
37	University of Yamanashi	1	3	76	Tokai National Higher Education and Research System	4	2
38	Shinshu University	1	3	77	Hokkaido National Higher Education and Research System	5	3
39	Shizuoka University	1	3	78	Nara National Institute Of Higher Education And Research	6	3

Source: Author made from the MEXT website, "4th Medium-term Goals / Medium-term Plans."

Note: T1 column: 1. Regional-contribution type, 2. Field-specific type, 3. World-class type, 4 to 6. University system

T2 column: 1. Designated national university, 2. University system which has the designated national university, 3. Other university and university system

Table 2: List of the 60 most frequent words

Extracted words	Freq	Extracted words	Freq	Extracted words	Freq
Research	620	Knowledge	112	School	81
Education	587	Training	111	Conduct	79
Society	583	Aim	110	Activities	78
Region	429	Field	105	Outcomes	77
University	365	Teacher	104	Turn	75
Promotion	215	Construction	103	New	73
Contribution	194	Science	102	Foundation	72
Human Resources	194	Create *	101	Innovation	71
World	184	Medium-term	101	Foundation	71
This University	167	Base	100	Advanced	69
Cooperation	167	Solution	99	Generation	69
Nurturing	164	Specialty	94	Culture	69
Goal	161	Medical Care	93	Philosophy	69
Task	152	Practice	89	Student	65
Diversity	147	Technology	88	Period	65
International	142	Sustain	84	Management	65
Realization	132	Industry	83	Support	61
Development	123	Environment	82	Reform	60
Enhancement	114	Work on	82	Utilize	60
Creation	112	Future	82	Institution	60

Note: * is not in the list of extracted frequent words in the previous study because it is a single word in Japanese.

4 Research Method and Results

4.1 Quantitative Text Analysis

Quantitative text analysis using the KH Coder was conducted [9] [10]. The text file to be analyzed was created from "Preamble: Fundamental Goals of the University." That amount varies from small to large by the university and the university system, but these are allocated one cell per university. The heading "Preamble: Fundamental Goals of the University" was removed. Apart from adjusting for garbled text, no filtering by stop-words or compound words was performed. Then analyzed with extracted words and co-occurrence network analysis.

4.2 Extracted Words

Table 2 lists the top sixty words with the highest occurrence of the preambles from the medium-term goals and plans of the seventy-five universities and the three university systems. The word that appears most often is "Research." It is 620 times. Then, "Education" 587 times, "Society" 583 times, "Region" 429 times, and so on. The 60th extracted word is "Institution," and the number of occurrences is sixty times.

4.3 Co-occurrence Network Analysis

Figure 1 and Figure 2 show the co-occurrence relation of the extracted words. The unit of the count was a paragraph, the minimum number of occurrences was fifty times, and the coefficient of co-occurrence was Jaccard for sixty pairs of the most strongly co-occurring words. The Jaccard coefficient measures the co-occurrence relation. The higher the coefficient, the darker the

line is. Two lines draw if an extracted word has co-occurrence relations with two external variables; those are university categories. The more frequently an extracted word appears, the larger the circle becomes. The extracted words do not draw if the co-occurrence relation is slight. The rectangles in the figure are the external variables that are university categories. Figure 1 and Figure 2 visualize the group's isomorphism and uniqueness of the national universities.

(1) University Type and System:

Figure 1 shows that although the graph is upside down, the results are the same as in previous studies. There is the common core consisting of "University," "Education," "Research," and "Society." Three types of universities: 1. Regional-contribution type, 2. Field-specific type, 3. World-class type, have their group's isomorphism and uniqueness. University systems share few networks with other groups, forming a unique entity.

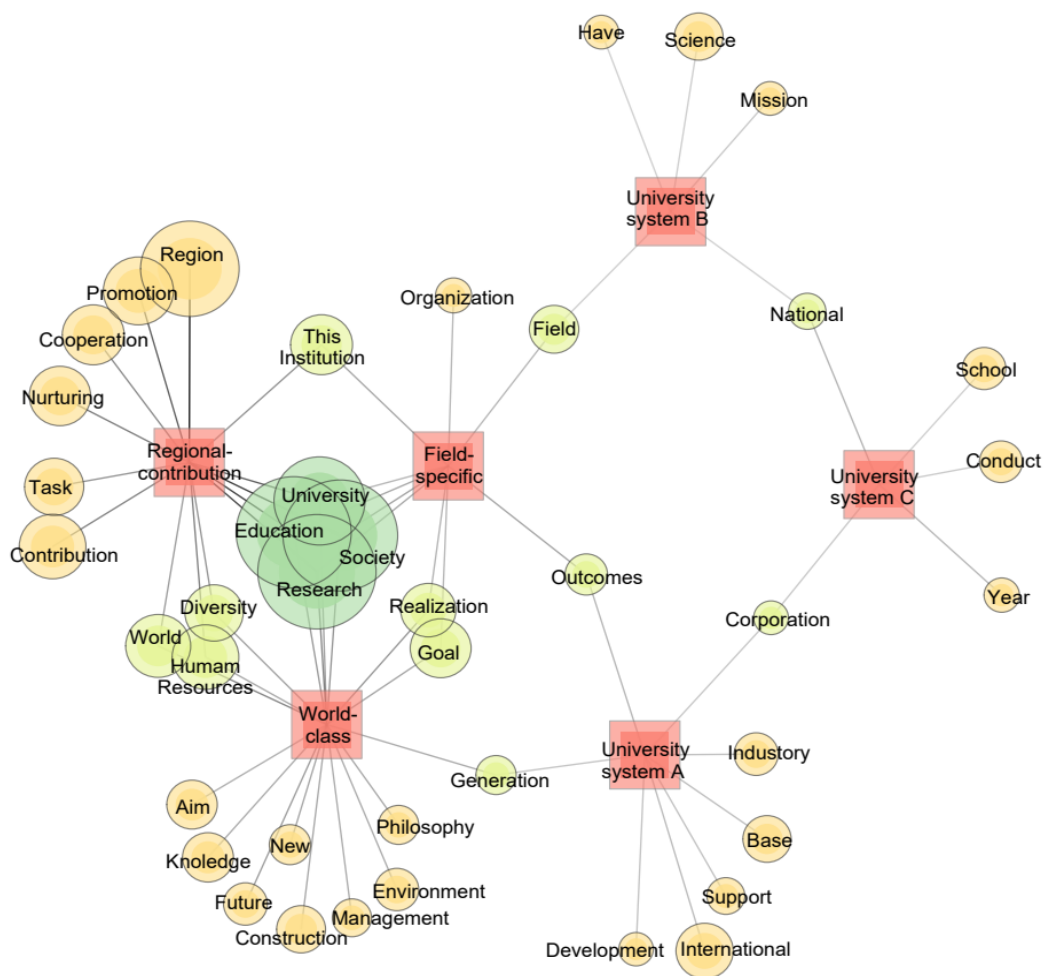


Figure 1: Co-occurrence network of frequently occurring words: University Type and System

(2) Designated National University:

Figure 2 also shows the common core among 1. Designated national university, 2. University system which has the designated national university, 3. Other university and university system. This consists of "University," "Education," and "Research. They have their group's isomorphism and uniqueness—some words such as "Society" and "Region" form quasi-core.

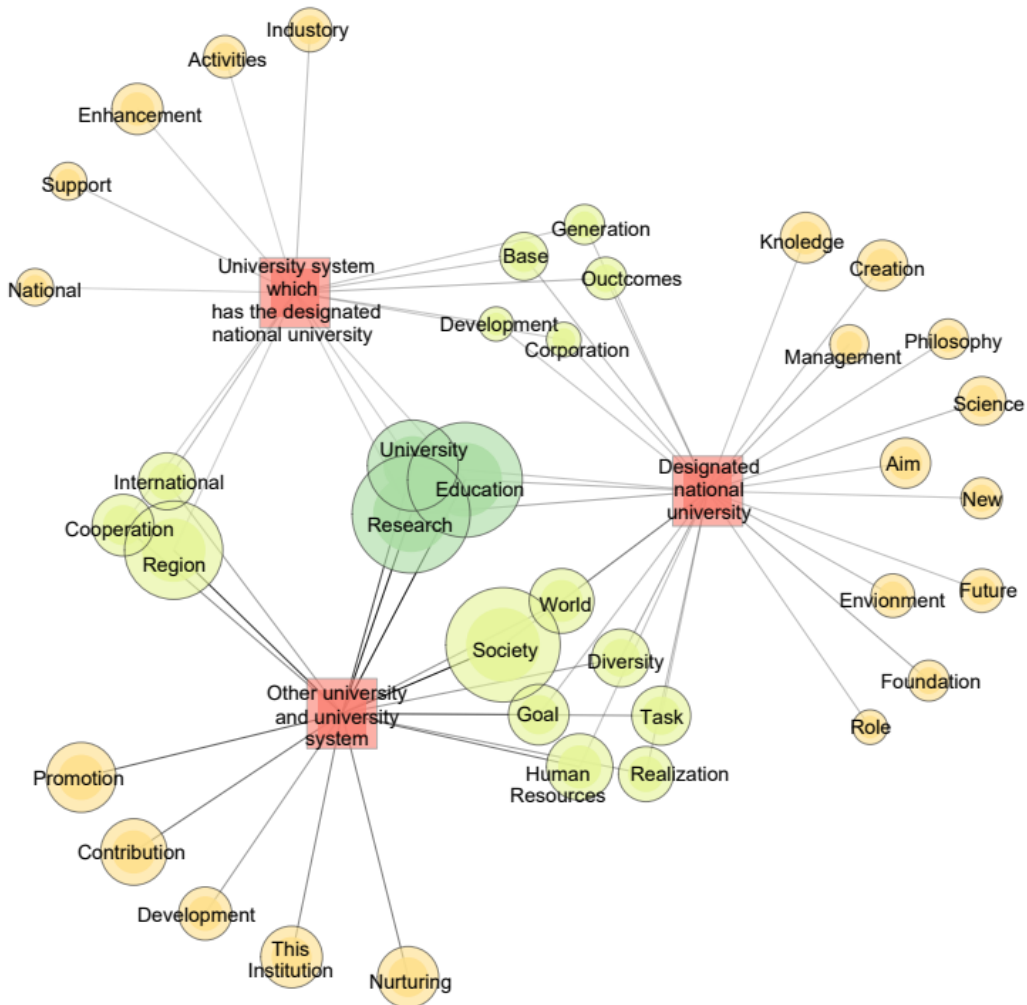


Figure 2: Co-occurrence network of frequently occurring words: Designated National University

5 Conclusion

This study analyzed MS described in the "Preamble: Fundamental Goals of the University" of the most recent version of the national universities' 4th Medium-term Goals and Plans. And this study visualized the common core, the same as the previous research. The common core consists of the four words: "Education," "Research," "Society," and "University." These essential functions of the university make the group's isomorphism and uniqueness of the national universities. Secondly, from the analysis of the Designated National University, there is the common core that consists of "University," "Education," and "Research." Some words, such as "Society" and "Region," forms quasi-core. The uniqueness of the World-class type and the Designated national university is similar. Both describe the philosophy of the university. This is also the same as the results of an analysis of the old-education-system universities by Hashimoto (2020) (p.66) [2]. The isomorphism of the national universities made of essential functions supports the view that MS is substantive and realistic rather than a symbolic and ritualistic artifact [3][4]. This is a natural conclusion since Japan's former universities were founded on the model of German universities. However, if we take a closer look, there may be a difference because specialized faculties were established earlier than the faculty of philosophy in Japan [11].

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