An Alternative Structure to "the Opposition Between Art and Money": Multiple Correspondence Analysis of Japanese Films in 1952-54 and 1955-58

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Abstract

Modern art systems are often characterized by a structure of "the opposition between art and money." Earlier studies have assumed that this structure is present in films as well (Duval 2006; Rossman and Schilke 2014). In contrast, Manabe (2019) argued that opposition between critical acclaim and popularity did not exist in Japanese films in the late 1950s. The present study examines and verifies the robustness of Manabe's argument. The dataset of Japanese films from 1952-54 was analyzed through multiple correspondence analysis and compared with the 1955-58 dataset (Manabe 2019).

It became clear that the 1952-54 and 1955-58 datasets have the same structure, without an axis reflecting the opposition between critical acclaim and popularity. The main trait of Japanese films in the 1950s was that critical acclaim had multiple evaluations. Despite the presence of some opposition or correlation, these tendencies override each other, and eliminate it in the overall structure.

Key word：Japanese film history, field theory, sociology of culture

Ⅰ　Introduction

Did Japanese films of the 1950s contain a structure in which critical acclaim opposed popularity? The present study answers this question by using a quantitative analysis approach. This structure suggests a trade-off between art and commercial success, exemplified by beliefs such as "artworks do not sell profitably because the audience does not understand them" and "to create bestsellers, artists must abandon experimental expressions." Generally, modern art systems are distinguished by this structure (cf. Bourdieu's study[1]), and additionally, earlier studies have assumed that this relationship is present in films. For instance, Duval suggested the existence of this structure in the data on French film directors[1] based on Bourdieu's field theory.[2] Rossman and Schilke also adopted Bourdieu's discussion of the theoretical hypothesis and created a model using data from the Academy Awards.[3] However, these analyses may not apply to Japanese films. In particular,

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there seems to be little opposition between art and commercial success in Japanese films in the 1950s.

The 1950s was the golden age of Japanese cinema. For instance, movies in Japan had an audience of 1.1 billion in 1958. Moreover, during this decade, Japanese filmmakers Kenji Mizoguchi and Akira Kurosawa were shortlisted for awards at international film festivals. In other words, these films attracted public attention as both commercial products and art works.

Manabe's quantitative analysis of data on Japanese films produced from 1955-58 showed that there is no trade-off relationship between critical acclaim and popularity.[4] However, this result may have been influenced by the dearth of independent films during this period. In 1954, Nikkatsu, the oldest studio in Japan, resumed filmmaking[II] and Toei, another film company, began to present its films as double features;[5] [6] several studies have argued that these two events negatively affected screening opportunities for independent films.[7] [8] Thus, we should not interpret this result as an indication of a structure where critical acclaim did not oppose popularity but rather verify the validity of the structure shown.

It is difficult to obtain an appropriate interpretation by examining individual cases. Consequently, we must analyze other data from the same period or compare the preceding and succeeding periods. Therefore, this paper examined data on films produced in Japan from 1952-54 and compared the results with those from 1955-58.[9] This analysis was used to discuss the characteristics of the structure of Japanese films in the 1950s.

II　Method and Variables

1．Multiple Correspondence Analysis

Multiple correspondence analysis (MCA) is a descriptive data analysis method through which nominal categorical data is summarized, and the qualitative properties of each variable can be converted into numerical values. MCA compounds new dimensions (axes) from variables that have high correlations; attribute coordinates related to each variable are plotted on these axes and represent the variables or cases as points in a geometric space.[III]

MCA is a suitable method for this study because the data have categorical variables. Further, earlier studies have also used this method; sociologists have implemented MCA since Bourdieu applied it in his studies,[10] using it for social surveys and the analysis of specific topics such as the filmmakers' field.[11] Therefore, this study employed MCA.

2．Data and Variables

The data for this study were mainly obtained from the "film records" and "records of shows" sections of the 1954, 1955, and 1956 editions of "The Film Yearbook" (Jiji Press, Ltd.), which held records of films released at the time. Specifically, films released from June 1, 1952 (two months following the enforcement of the San Francisco Peace Treaty[IV]) to May

31, 1954 (before Nikkatsu began to release films) were examined. Misprints and missing data were corrected and resolved using information from online databases (the collection of the National Film Archive of Japan,[v)] KINENOTE,[VI)] allcinema,[VII)] and the Japanese Cinema Databasev[III)]). During this period, 611 films were released, but information on certain important variables were missing for 11 films; therefore, 600 cases were analyzed. According to Manabe,[12)] seven variables should be examined but as only four of the 600 films were color films, we used six active variables, omitting "color or mono": 1) studio, 2) audience size, 3) review, 4) genre, 5) running time, and 6) adaptation or original. In the following sections, we reveal the details of these variables, which are the same as in Manabe's dataset to facilitate comparison.[13)] Table 1 shows the frequency distribution of all the variables across the 600 films.

2.1. Studio

For studio names, the study used those mentioned in "film records." In the 1950s, studios had differing influences on each film, because each studio affected the filmmaking process. For this reason, "studio" is included as a variable. In this variable, "Toho" includes two affiliate studios, "Tokyo Eiga" and "Takarazuka Eiga," and all independent studios are grouped into a single category. Consequently, the variable includes six categories: "Shochiku," "Toho," "Daiei," "Toei," "Shin-Toho," and "independent" (IND).

2.2. Audience size (Audience)

Records of audience sizes in representative theaters in Asakusa can be obtained from "records of shows." These data do not equate with domestic revenue and seem to have a bias towards Tokyo. This point is a limitation of "The Film Yearbook," but this is the only source of large-scale data. During the period under consideration, theaters often showed double features, and it can be assumed that the order in which films were shown indicated the respective value of each film. Thus, single and first-shown films (A) were distinct from second-shown films (B), and audience size was set as "under 10 thousand (～10)," "10～20 thousand (10～20)," "20～30 thousand (20～30)," and "over 30 thousand (30～)." Additionally, 21 films are highlighted in "film records," but not in "records shows." These films were included in the category "not run."

2.3. Frequency of reviews (Review)

In this study, we considered whether films were reviewed as opposed to their average review evaluations because it is difficult to accurately convert qualitative information into categories. Although the frequency of reviews does not specify whether the reviews were positive or negative, we can address this problem by focusing on the traits of the magazines that reviewed the movies and the number of times the films were reviewed.

If a review column discusses most films, it is more significant that a film is acknowledged

rather than whether the review is positive or negative. "Review of Japanese Film" and "Film Criticisms,"[IX] a column in the biweekly magazine "Kinema Junpo," are representative columns in this regard. Sato and Kishikawa reported that "Kinema Junpo" was the most authoritative magazine during this time for the present study because it included new releases[14]. By examining the archives of "Kinema Junpo" (from June 1952 to November 1954), we found 489 films in our dataset, suggesting that 20% of the dataset was not included.

Consequently, two magazines were reviewed to distinguish between acclaimed and obscure films. One was the "Kinema Junpo" magazine which had an annual top ten ranking of films. The other was "Eiga Hyoron," which was respected by contemporary young critics;[15] its film critique columns mentioned a few films every month. In our dataset, 52 films were nominated in the "Kinema Junpo Best Ten" (1952-54), and 61 films were reviewed by "Eiga Hyoron" (from June 1952 to November 1954). No film was not reviewed in "Review of Japanese Film" but mentioned in "Kinema Junpo Best Ten" or "Eiga Hyoron." Based on the rate of appearance in these publications, we created the following four categories: "none," for an extremely poor film; "once," for a relatively ordinary film; "twice," for a noteworthy film; and "thrice," for a critically acclaimed film. In our dataset, there was a direct correlation between the number of times a film was reviewed and the acclaim it won.

2.4. Genre

Genre was set as a variable based on the category attributed to the films listed in "film records." Although it is not a practical procedure to categorize films into an exclusive group, we added genre as a variable to reflect external conditions and the internal traits of films. In "film records," genres are unstandardized and have unique names; hence, we grouped similar names and, finally, created 16 categories for the analysis. These 16 categories are dissimilar from those used in the 1955-58 analysis because we felt that consistency in each dataset was more important than unreasonable standardization between the two datasets.

2.5. Running time

Running time is an important trait of films because short films can be inexpensive to make as compared with feature films. Therefore, independent films and second-shown films tend to be shorter. Data on the number of film rolls for each production are provided in "film records"; we considered films with fewer than six rolls as "short films" (short) and those with more than seven rolls as "feature films" (long).

2.6. Adaptation or original

Film adaptations of famous novels, comics, or radio dramas are expected to be commercially successful because they appear to be supplemented by a relatively large

popularity. On the contrary, film adaptations may have limited opportunities to reflect the director's artistic expression. In "film records," information regarding the medium through which films were originally released is not available, but there is information regarding the original author, which assisted in determining the origin of the films' stories; therefore, "adaptation (ADP)" or "original (ORG)" was added as a variable.

Table 1. Frequency distribution of variables

Variable	Category	Frequency	Variable	Category	Frequency
Studio	Daiei	105 (17.5)	Genre	Action(h)	134 (22.3)
	IND	71 (11.8)		Action(m)	19 (3.2)
	Shin-Toho	70 (11.7)		Comedy(h)	25 (4.2)
	Shochiku	138 (23.0)		Comedy(m)	55 (9.2)
	Toei	116 (19.3)		Documentary	10 (1.7)
	Toho	100 (16.7)		Drama(h)	19 (3.2)
Audience	～10(A)	84 (14.0)		Drama(m)	47 (7.8)
	～10(B)	9 (1.5)		Home/Office	37 (6.2)
	10～20(A)	251 (41.8)		Romance	37 (6.2)
	10～20(B)	31 (5.2)		Melodrama	79 (13.2)
	20～30(A)	112 (18.7)		Musical	28 (4.7)
	20～30(B)	26 (4.3)		Mystery(h)	23 (3.8)
	30～(A)	48 (8.0)		Mystery(m)	9 (1.5)
	30～(B)	18 (3.0)		Satire/Social	30 (5.0)
	not run	21 (3.5)		War	17 (2.8)
Review	None	109 (18.2)		Youth	31 (5.2)
	Once	418 (69.7)	Running	Long	534 (89.0)
	Twice	35 (5.8)	time	Short	66 (11.0)
	Thrice	38 (6.3)	Adaptation	ADP	370 (61.7)
			Original	ORG	230 (38.3)

Note: Figures in parentheses are percentages of the total number.
"(h)" means historical and "(m)" means modern.

Ⅲ　Results and Discussion

In this study, we used R ver. 3.6.3 for data processing, along with two optional packages: FactoMineR[16] ver. 1.4.1 for processing MCA and ggplot2[17] ver. 3.3.3 for visualizing the results. Table 2 shows each dimension's eigenvalue, contribution, and Benzécri's modified rates. Benzécri's modified rates can be estimated as the degree to which a dimension can summarize the variance of data and the cumulative rate until the third dimension returns 81.8% of the information. In brief, axes 1, 2, and 3 hold 80% of the information of the data. This result is similar to that for the 1955-58 dataset; thus, this study focuses on all three axes.

There are some differences between the variables from 1952-54 and 1955-58, such as genres and the inclusion of "color" and "Nikkatsu"; hence, we cannot compare the two datasets directly. However, even though a mathematical comparison is impossible,

developing an understanding of the two datasets and comparing the two results can reveal meaningful details. Therefore, this study referred to the results of the 1955-58 dataset; tables associated with this dataset have been presented (Tables 3 and 4).

Table 2. Eigenvalues and contributions of each dimension

Axis (dimension)	Eigenvalue	Contribution (%)	Modified rate (%)	Accumulation (%)
1	0.359	6.52	48.8	48.8
2	0.289	5.25	20.0	68.5
3	0.267	4.86	13.3	81.8
4	0.231	4.20	5.5	87.3
5	0.220	4.01	3.8	91.1

Table 3. Contribution of variables (%)

	Axis 1		Axis 2		Axis 3	
	1952-54	1955-58	1952-54	1955-58	1952-54	1955-58
Studio	9.98	8.55	28.83	28.41	24.43	40.91
Audience	35.25	28.56	14.16	22.85	32.24	39.42
Review	9.06	16.55	19.44	15.72	14.75	0.22
Genre	9.23	13.05	32.04	27.23	27.52	12.43
Running time	36.20	28.35	0.84	1.60	0.39	0.92
Adaptation/Original	0.29	0.01	4.70	1.95	0.65	4.40
Color	——	4.91	——	2.25	——	1.70

1. Axis 1

Table 3 shows the total contribution of each variable to each axis, and Table 4 presents the contributions of each variable category. The largest contribution to axis 1 is "running time" (36.2%), followed by "audience" (35.2%). As shown in Figure 1, which illustrates axes 1 and 2 for the 1952-54 dataset, "short" and second-shown films (B) are located on the right sides of axis 1 while "long" and single or first-shown films (A) are located on the opposite side. Similarly, the 1955-58 data opposes second-shown films (B) to single or first-shown films (A). [18] In both datasets, most second-shown films, often called "sister movies," were short films, so these positions are acceptable. In other words, for both datasets, axis 1 indicates the order in which films were screened.

However, axis 1 of the 1952-54 dataset differs from that of 1955-58 on the contribution of "review." "Review" variables for 1952-54 did not contribute as much as those for 1955-58 (see Table 3). Although both "review" variables increase as the coordinates of axis 1 decrease, "none," "once," and "thrice" are located closer to the center in the 1952-54 dataset than in the 1955-58 dataset. The four categories of the "review" are barely in order, but when the contribution rates are considered together, they cannot be interpreted in the same way as 1955-58. Manabe interpreted axis 1 of the 1955-58 dataset as the order in which the films were shown and the reviews of films made in major studios;[19] however, it is difficult to interpret axis 1 of the 1952-54 dataset in this regard.

Table 4. Contributions of all categories (%)

Variable	Category	Axis 1		Axis 2		Axis 3	
		1952-54	1955-58	1952-54	1955-58	1952-54	1955-58
Studio	Daiei	0.57	0.19	0.76	0.00	**3.29**	0.07
	IND	0.21	0.21	**19.67**	**16.89**	3.37	**9.12**
	Shin-Toho	2.04	0.44	0.64	**9.90**	**9.34**	**20.78**
	Shochiku	6.67	1.68	0.00	0.07	**6.42**	1.19
	Toei	0.00	**5.38**	**7.39**	1.10	1.61	**4.27**
	Toho	0.49	0.01	0.37	0.34	0.40	0.07
	Nikkatsu	——	0.64	——	0.11	——	**5.41**
Audience	～10(A)	2.31	1.51	5.23	**6.70**	**11.01**	**21.27**
	～10(B)	0.23	**4.24**	**3.16**	0.85	1.76	0.96
	10～20(A)	**3.05**	**3.66**	**2.90**	0.14	0.53	**2.47**
	10～20(B)	**17.97**	**10.91**	0.20	0.03	0.22	**3.37**
	20～30(A)	0.20	**4.19**	0.31	1.16	**8.87**	**3.77**
	20～30(B)	5.75	1.09	0.27	0.37	1.23	0.58
	30～(A)	0.21	1.15	0.06	0.07	**8.04**	**2.31**
	30～(B)	**5.23**	0.44	0.41	0.15	0.54	0.26
	not run	0.30	1.37	1.62	**13.38**	0.04	**4.43**
Review	None	**6.41**	**8.14**	0.18	1.19	2.19	0.04
	Once	0.46	0.16	2.22	**4.07**	0.06	0.00
	Twice	0.71	**4.85**	**5.66**	5.51	0.06	0.12
	Thrice	1.48	**3.40**	**11.38**	**4.95**	**12.44**	0.06
Genre	Action(h)	0.22	1.09	**7.70**	**4.63**	0.78	0.04
	Action(m)	0.01	0.08	1.34	1.38	1.05	0.37
	Comedy(h)	0.00	0.68	0.19	0.07	1.43	0.18
	Comedy(m)	0.21	1.58	0.08	0.03	1.88	1.11
	Documentary	0.15	0.06	**2.63**	**9.91**	3.00	**3.81**
	Drama(h)	0.04	0.74	0.11	0.01	**3.46**	0.46
	Drama(m)	1.99	**3.63**	2.28	**3.24**	**8.53**	0.04
	Home/office	0.55	0.06	0.65	0.16	0.34	0.00
	Romance	0.03	1.16	0.19	0.25	0.17	0.93
	Melodrama	1.48	0.20	0.23	0.47	0.03	0.10
	Musical	0.54	1.21	0.57	0.70	**3.67**	1.13
	Mystery(h)	0.32	0.01	0.57	0.28	0.04	0.83
	Mystery(m)	0.12	1.02	0.72	0.45	0.01	0.04
	Satire/social	2.03	0.97	**11.68**	1.62	**3.07**	0.04
	Youth	0.93	0.28	0.07	0.41	0.05	0.32
	War	0.61	——	**3.03**	——	0.01	——
	Children	——	0.13	——	**3.62**	——	**2.89**
	Sci-fi	——	0.15	——	0.00	——	0.14
Running time	Long	**3.98**	**5.80**	0.09	0.33	0.04	0.19
	Short	**32.22**	**22.55**	0.75	1.27	0.35	0.73
Adaptation or Original	ADP	0.11	0.00	1.80	0.62	0.25	1.39
	ORG	0.18	0.01	**2.90**	1.33	0.40	3.01
Color	Color	——	**4.16**	——	1.91	——	1.44
	Mono	——	0.75	——	0.34	——	0.26

Note: Bold values indicate higher than average contribution.
The data from 1955-58 has been drawn from Manabe's (2019) study; "Mono" refers to black and white films.
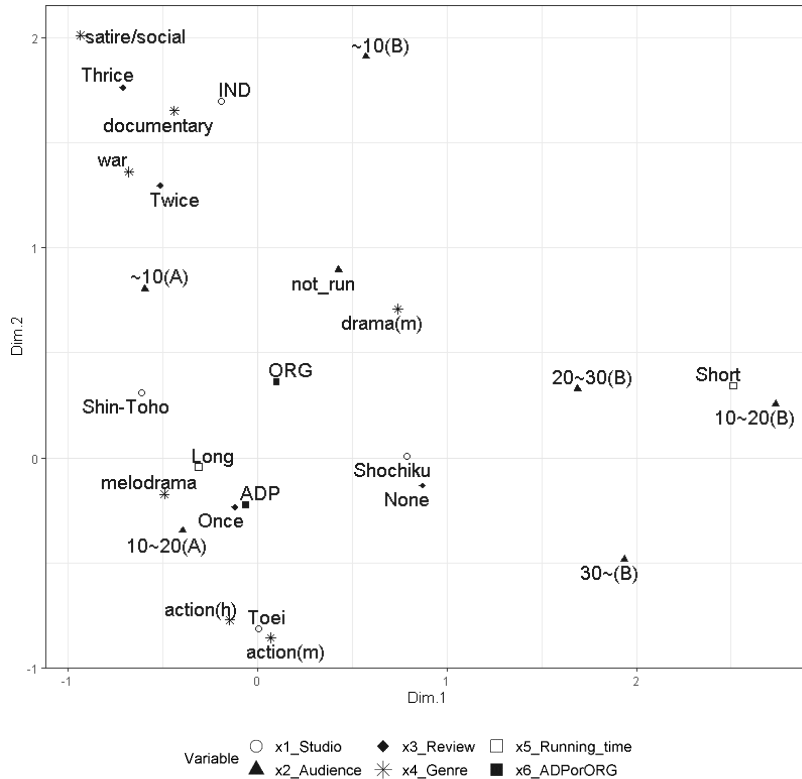
Figure 1. Plane 1 and 2 for the 1952-54 films
(labels are provided for variables with a contribution of more than 1.0)

An added feature of the 1952-54 dataset is that the scope of the left side was narrow compared with that of the 1955-58 dataset. The cause of this feature is that there were fewer second-shown films in 1952-54 than in 1955-58. Consequently, all these features support axis 1 in 1952-54, revealing the order in which films are shown; however, little information on reviews of films made in major studios is available.

2. Axis 2

Axis 2 for 1952-54 reflects critical acclaim. First, a notable feature is that "twice" and "thrice" make considerable contributions, being placed high on axis 2. On axis 2, the categories of "review" are not plotted linearly. This seems to be due to the distortion of the arch effects; however, films with little acclaim are plotted at the base of axis 2. Second, other categories that make significant contributions and are found on the positive side of this axis have a strong correlation with "review." For instance, while the average rate of "twice" or "thrice" is 12%, that for "IND," "satire/social," "documentary" and "war," "twice" or "thrice" account for 26.7%, 60%, 30%, and 35.3%, respectively. Third, categories that contributed strongly but are located on the negative side of the axis have few cases of "twice" or "thrice": 6.9% of "Toei" and 3.0% of "action(h)" are "twice" or "thrice." In

addition, "ORG" contributes highly; its rate of "twice" or "thrice" is 13.9%, and it is situated on the positive side of the axis, closer to the center. This positioning matches our overall interpretation.

Similarly, axis 2 for 1955-58 seems to reflect critical acclaim.[20] However, in comparison with 1952-54, the contribution and location of the categories of "audience" are different. For 1952-54, "〜10(A)," "〜10(B)," and "10〜20(A)" have high rates of contribution; "〜10(A)" and "〜10(B)" are located on the positive side, but "10〜20(A)" is found on the negative side, closer to the center. In contrast, for 1955-58, "not run" and "〜10(A)" contribute strongly to axis 2; "not run" is located on the positive side, but "〜10(A)" is positioned on the negative side. In short, "〜10(A)," which contributes highly to both datasets, moves from the positive to the negative side across them. The cause of this transfer is likely to be the decrease in screening opportunities for independent films and the financial difficulties of Shin-Toho.[x] Examining the datasets chronologically, the rate of "〜10(A)" in "IND" decreases from 38.0% to 21.0% and that of "not run" increases from 5.6% to 16.8%. This reveals that independent films, which had been unpopular from 1952-54 effectively stopped running from 1955-58. Further, for "Shin-Toho," the rate of "〜10(A)" increased from 38.6% to 72.8% across the datasets, while that of "twice" and "thrice" decreased from 11.4% to 5.7%. It is clear from these findings that the films by "Shin-Toho" became unpopular and were considered as poor-quality works.

Moreover, the reasons for the location of variables "〜10(B)" and "10〜20(A)" are as follows: "IND" accounts for 66.7% of "〜10(B)," and "once" accounts for 74.9% of "10〜20(A)." The transformation of the location and contribution of the audience size variables seem to represent the situation of independent studios during the dataset periods. In addition, this interpretation is supported by the fact that other categories of "audience" do not strongly contribute to axis 2 and are not located in a sequential order. In summary, in both datasets, axis 2 can be interpreted as indicating critical acclaim mainly for films made in independent studios, rather than indicating the opposition between art and commerce.

3. Axis 3

"Audience" makes the largest contribution to axis 3; particularly, single or first-shown films strongly contribute to this axis and are located in a sequential order. Regarding single or first-shown films, it suggests that the larger the audience, the smaller the coordinates. Second-shown films do not have this tendency and can be disregarded as they only represent 14% of all cases and make a low contribution. Additionally, the locations of the four studios that strongly contribute to the axis correspond with audience size on axis 3. Based on the average audience size for each studio,[XI] those located on the negative side have larger audiences: "Shochiku" and "Daiei" have an average audience size of 23,337 and 20,472, respectively; these numbers can be compared with "IND" and "Shin-Toho," which have an average audience of 13,007 and 10,925, respectively. Furthermore, the average correlation

coefficient for each case, between the coordinates on axis 3 and audience size, was -0.534 (p < .001). In sum, axis 3 opposes popular and unpopular films. Similarly, axis 3 for the 1955-58 dataset represents this feature.[21]

However, in comparison with the 1955-58 dataset, the contribution of "review" is quite different for the 1952-54 dataset. In dataset 1955-58, the sum of the contribution of "audience" was only 0.22%, and all categories were located near the center of axis 3. In contrast, in 1952-54, "thrice" contributes strongly (12.4%) and is found on the negative side. This feature can be considered as reviews of films made in major studios, which are not represented in axis 1. The rate of "thrice" increases with the audience size for single or first-shown films in both periods, with over 10% of "30〜(A)". It seems that this trait influences axis 1 in 1955-58 and axis 3 in 1952-54. Therefore, the high rate of contribution of "thrice" disqualifies axis 3 from being a pure indicator of popularity. For example, the average audience size for each genre does not always correspond with the location on the axis. "Musical," "drama(m)," "drama(h)," "documentary," and "satire/social" strongly contribute to axis 3; the locations of the former four categories correspond with the average audience size, while the fifth variable does not (see Table 5).

Regarding "satire/social," it seems that the strength of "thrice" (46.7%) offsets the effect of the decrease in audience size. Thus, axis 3 for the 1952-54 dataset indicates the popularity
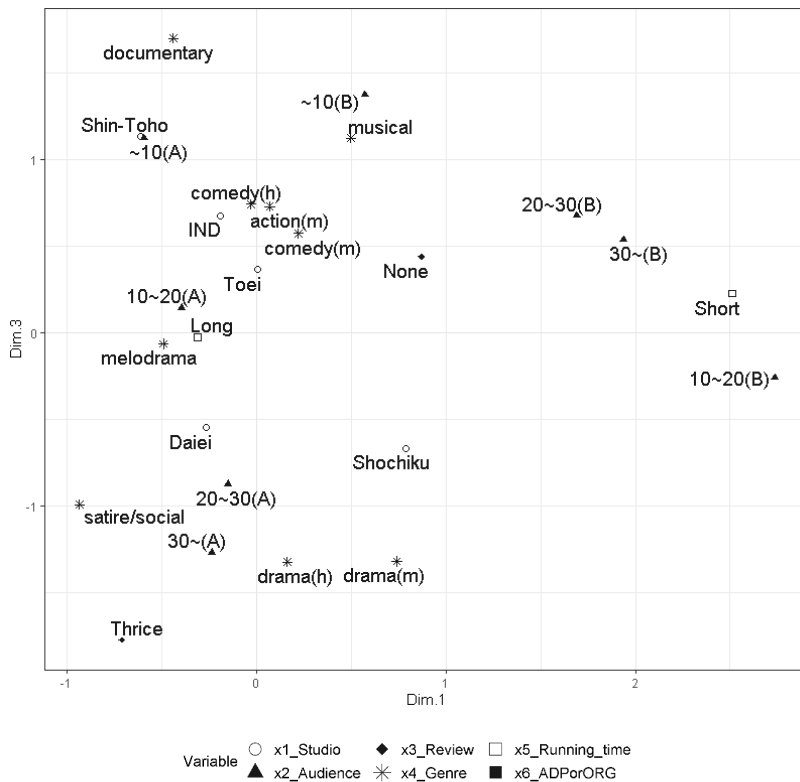

Figure 2. Plane 1-3 for 1952-54 (labels are only supplied for variables with a contribution of more than 1.0)

and reviews of films made in major studios. For the 1952-54 dataset, reviews of major studio productions are divided between axes 1 and 3 (mainly in axis 3). However, due to this division, no axis is completely representative of the reviews of films made by major studios. On axis 3, the contribution of "twice" is only 0.06%, and it is plotted between "none" and "once"; the coordinate of "none" is 0.440, "once" is 0.036, and "twice" is 0.130. Considering the contribution and coordinate of "twice" which indicates a noteworthy film, it is clear that axis 3 only partly reflects the reviews of films made by major studios. Therefore, axis 3 does not imply a correlation between critical acclaim and economic success.

Table 5. Average audience size and the coordinates on axis 3 for each genre

Genre	Average	Coordinates	Genre	Average	Coordinates
Documentary	12821.11	0.890	Mystery(h)	18312.00	0.061
Musical	15713.50	0.580	Action(h)	19070.36	0.122
Melodrama	16859.39	−0.029	Home/office	19866.49	−0.154
Satire/Social	16869.03	−0.533	Drama(m)	20042.25	−0.684
Action(m)	17265.42	0.299	Youth	20336.29	−0.087
Romance	17354.39	−0.104	Drama(h)	20337.71	−0.691
Comedy(m)	17397.37	0.299	War	21346.06	−0.059
Comedy(h)	18088.57	0.400	Mystery(m)	21687.22	−0.049

IV Conclusion

It is clear from the interpretation of the axes that the 1952-54 dataset has the same structure as that of 1955-58. Specifically, axis 1 reflects the order of presentation, axis 2 indicates critical acclaim, and axis 3 indicates popularity. However, there is a difference between the two datasets. In the 1955-58 dataset, reviews of films made by major studios appeared only in axis 1, but in 1952-54, they appear in both axes 1 and 3, with the main representation being in axis 3. The reason for this difference is a decrease in the screening opportunities for independent films. In 1952-54, the correlation between the order of presentation and "review" was weak because many "IND" films were second-shown films (B) or had an audience size of "∼10(A)"; In other words, "IND" films had the possibility of being both first-shown and second-shown. In contrast, in 1955-58, the correlation between the order of presentation and "not run" increased because "IND" films were less likely to be shown.

It is undoubtedly true that the decline in screenings of independent films affected the structure of the industry, but this analysis implies that the impact of this decrease was insufficient to reform the structure because the axes of the datasets contain the same main traits. The differences between the datasets that contain reviews of films made by major studios and variations in the locations of each variable are simply surface-level alterations.

None of the axes reflect the trade-off relationship between critical acclaim and popularity in both datasets. Taking this result into account, the structure of Japanese films in the 1950s differs from what Bourdieu calls "the opposition between art and money."[22] In other

words, there is an alternative structure to Bourdieu's analysis of literature or art in Japanese films in the 1950s.

This tendency is similar to some previous findings. According to Tanaka, Okawa Hiroshi, the president of Toei, said, "We will continue to provide entertainment, but at the same time, we would like to create artistic films as much as possible."[23] In addition, Ito indicates that Ozu Yasujiro, one of the most artistic film directors of the time, considers critical acclaim and popularity of films to be complementary rather than oppositional.[24]

Is this alternative structure characterized by a positive correlation between critical acclaim and popularity? Certainly, axis 3 for the 1952-54 dataset suggests a correlation between the two aspects. However, the audience sizes of first-shown films gradually increase if the coordinates decrease, but categories of "review" do not have the same tendency. "Thrice" is the only factor that has a high contribution; others rarely contribute to axis 3 and are not plotted linearly. In addition, this weak correlation disappears in the 1955-58 dataset. Therefore, it is inappropriate to characterize the structure of Japanese films in the 1950s based on the correlation between critical acclaim and popularity.

More importantly, it seems that critical acclaim in the 1950s had multiple evaluations (for major studio productions and independent films) because the contribution of "review" divides into axes. Therefore, although there was some opposition or correlation, these tendencies neutralized each other and there was no tendency toward opposition or correlation in the overall structure. This is how the alternative structure was characterized.

The results of the analysis lead to the conclusion that the Japanese film industry of the 1950s did not feature a structure wherein critical acclaim opposed popularity. Further studies should involve comparisons across different periods or countries should be conducted to increase the level of knowledge on this topic.

Notes

i) Duval used economic indicators and awards instead of variables reflecting the characteristics of works, such as genres.[25] Thus, these variables may be biased toward showing the opposition between art and money.

ii) The revitalization of the film market in Japan is the reason for this resumption.[26] Incidentally, the filmmaking part of Nikkatsu was merged with Daiei in 1942 because of World War II.

iii) However, the distance between the categories of different variables is not always mathematically correct.[27][28] Therefore, we focused on the trait of the axes and not the distance between variables.

iv) This treaty meant that the Japanese film industry became free from censorship by the Allied powers after World War II.

v) http://nfad.nfaj.go.jp/ (last accessed: 2021.09.10).

vi) http://www.kinenote.com/main/public/home/ (last accessed: 2021.09.10).

vii) http://www.allcinema.net/prog/index2.php (last accessed: 2021.09.10). According to the website, "allcinema" is spelled as one word.

viii) https://www.japanese-cinema-db.jp/ (last accessed: 2021.09.10).

ix) With regard to this, Manabe examined only "Review of Japanese Film,"[29] but we found that certain

films were not included in it because they were reviewed in "Film Criticisms." Therefore, we reexamined the 1955-58 data, but the results had insignificant changes. The results for 1955-58 presented in this paper are from our reexamination.

x) Shin-Toho is the smallest studio among the major studios and went bankrupt in 1961. Refer to Inoue[30] for details of its financial difficulties.

xi) In this paper, all averages for audience size are quantified by excluding "not run" films.

References

1) Bourdieu, P., *Les règles de l'art: Genèse et structure du champ littèraire*, Paris, France: Éditions de, Seuil, 1992.

2) Duval, J., "L'art du réalism: Le champ du cinéma français au début des années 2000," *Actes de la Recherche en Sciences Sociales*, 161-2, pp.96-115, 2006.

3) Rossman, G. & Schilke, O., "Close, But No Cigar: The Bimodal Rewards to Prize-Seeking," *American Sociological Review*, 79(1), pp.86-108, 2014.

4) Manabe, K., "Structural Analysis of Space of Works in Japanese Films in the Late 1950s," *Social Systems*, 22, pp.133-47, 2019.

5) Inoue, M., "Some Characteristics of the Film Industry and Corporate Activities of Daiei Motion Picture Co., in the Post-Occupation Period (1)," *Rikkyo Economic Review*, 69(1), pp.55-76, 2015.

6) Inoue, M., "The Actual Situation of the Japanese Film Industry's Postwar Golden Age (1) Some Characteristics of the Film Industry and Corporate Activities of Daiei Motion Picture Co. in the Post-Occupation Period: Addendum," *Rikkyo Economic Review*, 70(3), pp.129-62, 2017.

7) Tanaka, J., *Developing History of Japanese Film IV: The Best Era for Films*, Tokyo: ChuoKoron-Sha, 1976.

8) Yomota, I., *110 Years of Japanese Film History*, Tokyo: Shuei-Sha, 2014.

9) Manabe, op. cit.

10) Bourdieu, P., *La Distinction: Critique Sociale du Jugement*, Paris, France: Éditions de Minuit, 1979.

11) Duval, op. cit.

12) Manabe, op. cit.

13) Ibid., pp.137-40.

14) Sato, T. & Kishikawa, M., The Era of "Eiga Hyoron, Tokyo: Catalog House, 2003, pp.10-2.

15) Ibid., pp.17-8.

16) Lê, S., Josse, J., & Husson, F., "FactoMineR: A Package for Multivariate Analysis" *Journal of Statistical Software*, 25(1), pp.1-18, 2008.

17) Wickham, H., ggplot2: Elegant Graphics for Data Analysis, Springer-Verlag New York, 2016.

18) Manabe, op. cit., pp.141-2.

19) Ibid., pp.141-2.

20) Ibid., pp.142-3.

21) Ibid., pp.142-4.

22) Bourdieu, *Les règles de l'art: Genèse et structure du champ littèraire*, pp.175-81.

23) Tanaka, op. cit., p.141.

24) Ito, H, "Yasujiro Ozu's Box Office Strategy: The Negotiation between Authorship and Corporatism in "Higanbana,"" Tanikawa, K., ed, *Turning Points in the History of the film Industry: Management, Succession, and Media Strategy*, Tokyo: Shinwa-Sha, pp.99-130, 2020.

25) Duval, op. cit.

26) Inoue, M., "The Actual Situation of the Japanese Film Industry's Postwar Golden Age (2) Some Characteristics of the Film Industry and Corporate Activities of Daiei Motion Picture Co. in the Post-Occupation Period: Addendum," *Rikkyo Economic Review*, 71(2), pp.67-107, 2017.

27) Fujimoto, K., "The Condition of Appropriate Interpreting the Graph of Correspondence Analysis: Understanding Standard Coordinate, Principal Coordinate" *Bulletin of Tuda University*, 49, pp.141-53, 2017.

28) Le Roux, B., *Multiple Correspondence Analysis: Quantitative Applications in the Social Sciences*, Thousand Oaks, CA: SAGE Publications, 2010.

29) Manabe, op. cit.

30) Inoue, M., "The Actual Situation of the Japanese Film Industry's Postwar Golden Age (2) Some Characteristics of the Film Industry and Corporate Activities of Daiei Motion Picture Co. in the Post-Occupation Period: Addendum," *Rikkyo Economic Review*, 71(2), pp.67-107, 2017, pp.94-6.