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From Imagery to Intimacy: Semantic and Sentimental Change in Japanese Enka Lyrics

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This study investigates long-term cultural change in Japan by analyzing emotional shifts in enka song lyrics from 1945 to 2020. Using a corpus of 2,500 songs, I tested two hypotheses: (1) that lyrics have become more emotionally negative and intense over time, and (2) that expressions of mixed emotions within songs have declined. In Study 1, I applied the NRC-VAD lexicon to measure valence, arousal, and dominance in common nouns. Results show flat valence scores but significant increases in arousal and dominance, suggesting that lyrics have become more emotionally intense but not more negative over time. In Study 2, a large language model assigned sentiment scores to over 43,000 lyric chunks. Contrary to expectations, average sentiment became more positive, and mixed emotions remained stable. These findings suggest that emotional ambivalence remains culturally accepted, even as emotional expression becomes more intense. Peaks and dips in sentiment scores align with periods of national unrest, suggesting that lyrics are sensitive to shifting social conditions. I conclude by highlighting parallels with research on language change, suggesting that both linguistic and cultural shifts may be driven by similar top-down and bottom-up processes.

Keywords: Japanese, Enka Music, Lyrics, Sentiment, Diachronic Change

1. Introduction

1.1. Cultural Differences

Travelers often notice cultural differences between their home country and the places they visit. These can include food, clothing, and architecture. But deeper, less visible differences also exist, such as people's attitudes, behaviors, and ways of thinking. Research in cultural psychology shows that these differences are shaped by environmental and social factors, i.e., culture (Oishi, 2014).

Cultural psychology has identified several key dimensions of cultural variation, such as individualism versus collectivism, masculinity versus femininity, and tolerance for uncertainty (Hofstede, Hofstede, & Minkov, 2010). One of the most studied is individualism-collectivism (Triandis, 1995). Collectivist cultures emphasize group needs and harmony, while individualist cultures prioritize personal goals and self-expression. Eastern cultures like Japan are generally more collectivist than Western ones.

The development of these differences is linked to ecological and historical factors. For instance, societies with a history of cooperative farming, such as rice cultivation, often show stronger collectivist values than those with more independent farming styles (Talhelm et al., 2014). Urban living also plays a role. People in large, anonymous cities tend to become more individualistic than those in smaller, tightly connected communities (Greenfield, 2009; Hamamura, 2012).

However, cultural differences are not limited to comparisons between East and West. Within Japan, there is significant internal variation. For example, the Tohoku region is generally more collectivist

(Yamawaki, 2012), while self-employed individuals show more individualistic traits than company workers (Miyanaga, 1991). These patterns often reflect differences in social environments. Larger families living together encourage collectivism, while living alone in big cities fosters individualism (Yamawaki, 2012).

According to Japan's Statistics Bureau, family sizes are shrinking, urbanization is rising, and fewer people are working in traditional jobs like farming. These trends suggest that major social changes are underway. This suggestion leads to a central question: Is Japanese culture changing as well? More specifically, is it becoming more Western? Are the differences between Japanese and Western cultures narrowing?

I expect the answer is yes. Scholars like Greenfield (2009, 2013) and Inglehart (2012) argue that modernization, urbanization, and rising wealth or education promote individual autonomy and self-expression—traits associated with individualism. Still, the evidence is mixed. Hamamura (2012) found through surveys that collectivist values remain strong. In contrast, Ogihara et al. (2015) examined naming trends and found growing signs of individualism. These different indicators point to different conclusions.

1.2. A New Project: The JPOP Corpus

This section introduces a new research project: the JPOP Corpus. The goal of this project is to explore cultural variation and change in Japan by compiling a large collection of Japanese song lyrics and analyzing them for cultural patterns. This approach offers several advantages. Traditionally, psychologists have used surveys—often with university students—to study cultural differences. More recently, researchers have also analyzed cultural products such as art, literature, and media to supplement experimental methods (Morling & Lamoreaux, 2008). Compared to survey data, cultural products provide deeper insight into shared values and allow researchers to track changes over time (Lamoreaux & Morling, 2011; Morling & Lamoreaux, 2008; Nand et al., 2014).

Among various cultural products, song lyrics are especially useful for studying values, identity, and social change. They are widely consumed, emotionally expressive, and produced over long periods of time, making them valuable for tracking cultural shifts. Although many studies have examined English song lyrics to study cultural change (e.g., Brand et al., 2019; DeWall et al., 2011; North et al., 2021; Parada-Cabaleiro et al., 2024; Serrà et al., 2012), few have analyzed Japanese lyrics (e.g., De Almeida & Uchida, 2018, Mita, 1967; Ohde et al., 2013; Yamane, 1997). Existing studies on Japanese lyrics tend to be small-scale, focused on limited genres, and cover only short time spans. No previous study has systematically analyzed a broad range of genres—including Japanese rock or Japanese hip hop—which are especially relevant for understanding modern cultural change.

The JPOP Corpus addresses these gaps. It is a large-scale collection of Japanese song lyrics across four genres: enka, pop, rock, and hip hop. These genres differ in their associations with traditional vs. modern values and with Japanese vs. Western cultural influences. The next section explains how the corpus was constructed.

This project has two main goals. The first is to explore Japan's polycultural nature—the idea that individuals are shaped by multiple, interacting cultural traditions (Morris et al., 2015). By comparing lyrics across and within genres, the project seeks to understand the complexity of cultural expression in modern Japan.

The second goal is to examine how Japanese cultural patterns have changed over the past 80 years, especially in relation to Western influence. By combining multiple genres with historical analysis, the project aims to provide a detailed picture of cultural change. This article presents one example of such an analysis. The next section outlines the method.

1.3. Using the Corpus to Examine Ongoing Cultural Change

This section provides an example of how the JPOP Corpus can be used to study cultural change in Japan. While the corpus could also be used to investigate language change over time, many studies already focus on this topic using Japanese corpora (e.g., Heffernan & Imanishi, 2023). Instead, this study intentionally focuses on cultural patterns.

At the time of writing, only the enka genre has been fully compiled. Enka artists often idealize the postwar period, making it a natural starting point. The enka dataset spans from 1945 to 2020, providing a continuous timeline for analysis. Using this dataset, two hypotheses are tested.

The first hypothesis attempts to answer the question: Does the Japanese music industry reflect the same trends found in Western music? Emotions are also an ideal topic because research shows they are shaped by culture (Mesquita, Boiger, & De Leersnyder, 2016).

Previous studies have found that English-language song lyrics have become more negative and personal over time. For example, Parada-Cabaleiro et al. (2024) observed a steady increase in negativity and simplicity in lyrics over five decades. Cole (1971) had already noted a shift toward unhappier themes in the 1960s, especially in love songs. Building on this work, Brand et al. (2019) analyzed over 160,000 songs and confirmed a long-term trend toward more negative emotions in popular English music. They argued this trend is driven not by imitation but by an increasing cultural preference for negative emotional content. Based on these findings, I hypothesize that Japanese lyrics—like English ones—are becoming more negative and more emotionally intense over time.

The second hypothesis explores a deeper cultural difference between East and West: how people understand and experience mixed emotions. These are emotional states that include both positive and negative feelings at the same time—for example, feeling proud but also a little sad while watching a child graduate. Fang, Sauter, and Van Kleef (2018) found that East Asians are more likely than Westerners to perceive multiple emotions in a single facial expression, especially when the emotions are similar. Miyamoto, Uchida, and Ellsworth (2010) showed that Japanese participants more often report mixed emotions, especially in mostly positive situations. Zheng et al. (2021) found that Chinese participants felt less discomfort from emotional conflict than Americans, likely due to dialectical thinking, which is more common in East Asia. Kim et al. (2014) further demonstrated that East Asians show a greater preference for entertainment that evokes both joy and sorrow, such as the American movie *Titanic*, which portrays love and connection alongside loss and tragedy. Together, these studies suggest that East Asians are more accepting of emotional contradictions. Given this cultural difference, the second hypothesis claims that lyrics that express both positive and negative emotions in the same song are becoming less common over time.

The next section describes the construction of the JPOP Corpus. Sections 3 and 4 present case studies testing the two hypotheses. The final section discusses the conclusions.

2. Building the JPOP Corpus

2.1. Genres

The corpus consists of four genres of music: popular, enka, rock, and hip hop. Each of these genres emphasizes different cultural values.

2.1.1. Popular

Modern Japanese popular music traces its roots to the Occupation Period (1945–1952), when Japanese musicians performed American jazz and pop songs for U.S. soldiers in military clubs (Tooya, 2014). Local theaters and coffee shops also played American records, helping spread Western styles

even before television became common. Artists like Misora Hibari emerged from this environment, setting the foundation for a uniquely Japanese pop style.

In the late 1950s, covering American songs such as Elvis Presley's Heartbreak Hotel was widespread (Shimizu, 2014). Events like the Nichigeki Western Carnival (1958) featured these performances. However, growing competition pushed Japanese musicians to create original songs. Influenced by earlier covers, artists like Hirao Masaaki began crafting music that expressed a more local identity (Shimizu, 2014). Over time, imitation gave way to adaptation, with foreign styles reshaped into something distinctly Japanese.

By the 1970s and 1980s, Japanese pop had developed its own character, especially with the rise of the idol system. Young female singers were often selected early and given songs written by male lyricists (Stanlow, 2000). Lyrics typically focused on idealized romance, and many female artists began using English words—partly as a way to escape linguistic and social restrictions in Japanese (Stanlow, 2000).

Overall, Japanese pop music reflects an ongoing negotiation between foreign influence and domestic identity, blending admiration for American culture with the desire to create something meaningful at home.

2.1.2. Enka

Modern enka emerged in the late 1960s as a reaction to the rising influence of Western popular music in Japan (Wajima, 2014). Promoted by the music industry, enka was framed as a symbol of authentic Japanese identity, emphasizing traditional emotions and values (Yano, 2000, 2002). Its songs were crafted to sound nostalgic and timeless, expressing ideals such as duty, perseverance, and emotional restraint—qualities associated with *nihon no kokoro* 'Japanese spirit' (Yano, 2000).

For many older, rural, working-class listeners, enka came to represent the essence of Japanese tradition. However, younger generations increasingly saw it as outdated (Yano, 2002). Despite this generational divide, enka remains a strong symbol of Japan's cultural self-image. This commitment to tradition extends beyond the music to how artists are presented. Enka singers often wear traditional clothing, sing with a serious tone, and express deep feelings in a calm, controlled way.

Singers do not always begin their careers as enka performers; in some cases, record companies assign the label (Yano, 2002). Once labeled, artists are expected—by both producers and fans—to fully embrace the genre. As a result, crossover with other styles, such as pop, is rare.

One reason for this separation is the genre's reliance on *kata*—"patterns or conventions used repeatedly in the practice of an art form" (Yano, 2000, p. 63). These set forms help preserve continuity and tradition. Enka lyrics draw from a limited set of words, phrases, and themes. By doing so, the enka genre remains clearly distinct from other contemporary genres.

2.1.3. Rock

Japanese rock music took root in the mid-1960s, a time when musical equipment became more affordable, music consumption expanded, and Western artists like the Ventures and the Beatles gained popularity in Japan (Minamida, 2014; Stevens, 2008). For the first time, Western musical scales and rhythms were fully adopted, and new music from abroad reached Japan with little delay (Minamida, 2014).

Rock quickly became a key part of youth culture. It stood apart from mainstream pop by focusing on personal and social expression rather than commercial success (Minamida, 2014). While pop music aimed to please a wide audience, rock emphasized creativity and commentary on social issues. In the late 1960s and early 1970s, the rise of "new rock" emphasized independence, as musicians sought creative freedom and began releasing their work outside the major music industry (Stevens, 2008). Japanese rock, while shaped by global trends, became a space for innovation and artistic freedom.

Unlike enka, where genre boundaries are strictly maintained, the line between rock and pop in Japan is flexible. Artists often blend the two styles, and it is common for rock musicians to produce pop songs—and vice versa.

2.1.4. Hip Hop

Japanese hip hop developed under strong American influence. Artists and fans adopted elements such as dreadlocks, graffiti, and streetwear to show authenticity (Condry, 2006). Some even darkened their skin to better match the perceived image of American hip hop. However, Japanese artists did not simply imitate—they adapted hip hop to fit local values, focusing on self-expression, resilience, and group loyalty (Condry, 2006).

A key part of this scene is participation in close-knit "crews," which play an important role in shaping identity. This mirrors the importance of group belonging in Japanese society, such as company membership (Yamakoshi, 2010). Artists connect through shared activities like rapping, DJing, breakdancing, and graffiti, as well as symbolic acts like tattooing. These communities create strong support networks that challenge everyday social expectations (Yamakoshi, 2010).

Although American hip hop provided the foundation, Japanese artists have shaped it into a distinctly local style. However, as the genre became more popular in Japan—just as it had in the U.S.—a new tension emerged: staying true to underground roots versus reaching wider audiences. Some artists focused on keeping hip hop "authentic" (Condry, 2006), while others blended it with pop and dance music to gain mainstream appeal. Groups like Ketsumeishi, HOME MADE 家族, and RIP SLYME are known for this crossover style.

2.2. Data Collection

2.2.1. Scale and Scope

The corpus will include 11,000 songs, spanning an 80-year period from 1946 to 2025. The time ranges and target numbers of songs for each of the four genres are shown in Table 1. If the data for a specific cell has already been collected and processed, the number is shaded.

Table 1. Target Number of Songs by Genre and Period

Genre	1946～1950	1951～1955	1956～1960	1961～1965	1966～1970	1971～1975	1976～1980	1981～1985
Popular	250	250	250	250	250	250	250	250
Enka	--	--	--	--	--	250	250	250
Rock	--	--	--	--	--	250	250	250
Hip Hop	--	--	--	--	--	--	--	--

Genre	1986～1990	1991～1995	1996～2000	2001～2005	2006～2010	2011～2015	2016～2020	2021～2025
Popular	250	250	250	250	250	250	250	250
Enka	250	250	250	250	250	250	250	250
Rock	250	250	250	250	250	250	250	250
Hip Hop	--	--	250	250	250	250	250	250

This sample is not representative of the Japanese music industry as a whole. According to recent statistics, enka made up a relatively small portion of new releases in 2022, with only 638 new titles. In contrast, pop and rock-related genres—including hip hop—accounted for nearly 6,000 new titles.

The total number of songs produced to date also shows this difference: enka has about 18,000 catalogued titles, while pop has over 78,000 and rock around 15,700. Hip hop is not listed as a separate

genre in industry data, as it is usually grouped under broader pop and dance categories. Compared to pop, which dominates Japan's current music scene, enka and hip hop remain smaller, niche genres.

Despite these differences in popularity, the corpus is balanced across genres as much as possible. As shown in Table 1, each genre contributes 250 songs in the most recent time periods. This balanced design allows for direct comparisons between genres, even when their overall presence in the industry differs greatly.

2.3. Compiling the Songs

I began by compiling a list of approximately 35,000 songs along with their release dates. This list was created using online sources and published lyric books, such as Asano (2002) and Ishii (2014). The following websites provided most of the data:

Wikipedia.com
duarbo.air-nifty.com
genius.com
mojim.com
music.my.coocan.jp
uta-net.com

The list was then shuffled to randomize the order. Songs were processed one at a time. If any of the following limits were exceeded, the song was skipped:

Limit 1: No more than 250 songs in a single cell of Table 1.
Limit 2: No more than 15 songs by the same artist in a single cell.
Limit 3: No more than 15 songs by the same writer in a single cell.

The third limit was necessary because, especially between 1946 and 1970, many writers wrote for multiple artists. For example, Takao Saeki wrote 695 songs for 89 different artists during this period.

Each song was first classified by genre. Ambiguous cases were handled using specific criteria. Enka was the least ambiguous genre: once an artist is known as an enka singer, their songs are typically considered enka (Yano, 2000).

Hip hop classification followed Infumi (2022), a comprehensive guide to Japanese hip hop artists. For artists who blended popular and rock styles, I referred to their Wikipedia articles. If the article included the Japanese word ロック 'rock' at least five times—beyond just the genre label—the artist was categorized as rock. Otherwise, they were classified as pop. These instances of the word tended to occur in quotes, festival names, and album or song titles.

After confirming the genre, I checked if the song stayed within the three limits. If it did, I attempted to acquire the lyrics.

Lyrics were gathered primarily from the websites listed above. YouTube was also a valuable resource, as many fan-made videos include onscreen lyrics. For older songs, printed inner sleeves from LP albums—common from the late 1960s to early 1990s—were also a useful source. When lyrics were found, they were either downloaded or transcribed by hand.

The success rate of acquiring lyrics varied by era. For postwar songs, it was around 25%, but for the most recent songs, it was about 90%.

Finally, I applied two inclusion criteria:

The lyrics had to be at least 20% Japanese.
The lyrics had to be at least five lines long.

Songs almost entirely in another language, such as English, were excluded, as they may have been intended for non-Japanese audiences and might not reflect Japanese culture.

2.4. Adding Part of Speech Data

Each song is parsed into morphemes and tagged with part-of-speech data using the MeCab parser. The completed corpus will contain approximately 3 million morphemes. Based on past previous experience, MeCab achieves about 95% accuracy. Although accuracy improves with training, some types of lyrics remain prone to errors even after refinement.

Common sources of parsing errors include:

Non-standard kanji: 泪, 唄, 聲, 學
Excessive hiragana use: みんなみずいろparsed as 皆見ず居ろ instead of 皆水色
Non-standard okurigana: 聞える instead of 聞こえる
Slang: チりゃいい, ググる, タピろう, disる
Dialects: 思いやんせ, 忘れしゃんすな
Foreign words: ティーチャー, ハイパー
Pre-modern Japanese: 忘るること, 忘らりょ
Rare proper nouns: モンテンルパ (a city in the Philippines)
Sound words: シャンシャラリ, ヨイヤアイヤ

Every line of MeCab output is manually checked and corrected, requiring significant labor. To support this work, several Python-based tools were developed using Kakenhi grant (C) 17K02761. Student research assistants are trained to use these tools and help with the manual correction process.

2.5. Adding Meta Information

The final version of the corpus will include a metadata file listing all songs. For each song, the following information will ideally be recorded: song title, singer name, band or group name, singer's gender, lyricist name, lyricist's gender, year of release, genre, and five-year period (see Table 1).

Including gender information allows the corpus to be used for gender-related studies. In the past, the portrayal of women in the music industry has been both controversial and widely criticized (Stanlow, 2000).

3. Study 1: Ongoing Changes in Valence, Arousal, and Dominance

3.1. Objective

This study investigates long-term emotional trends in Japanese enka lyrics using the VAD (valence, arousal, dominance) framework. Valence measures the degree to which a word's emotional tone is pleasant or unpleasant. Arousal captures the level of emotional intensity or excitement associated with a word. Dominance reflects the degree of control or power associated with the word's emotional meaning.

This study tests the hypothesis that Japanese lyrics have become more emotionally negative and intense over time, mirroring trends observed in Western popular music. To do so, I apply the NRC-VAD lexicon (Mohammad, 2018) to the JPOP Corpus in order to track changes in emotional tone over a 75-year span. This study provides a data-driven view of how emotional expression and cultural ideals have shifted in postwar Japan.

3.2. The VAD Model of Emotions

Originally developed in environmental psychology (Mehrabian & Russell, 1974), the VAD model is now widely used in linguistics and affective computing. Compared to categorical models (e.g., joy, anger), it allows for more nuanced analysis of emotional tone in language. For instance, Warriner, Kuperman, and Brysbaert (2013) provided VAD ratings for nearly 14,000 English words, offering a robust dataset for emotion research.

Mohammad (2018) expanded on this by developing the NRC Valence, Arousal, and Dominance (NRC-VAD) Lexicon, which contains human-annotated VAD scores for over 20,000 English words. The latest version (2.1), released in March 2025, includes more than 55,000 terms (Mohammad, 2025). Each word is rated on three 9-point scales—valence (1 = unpleasant, 9 = pleasant), arousal (1 = calm, 9 = excited), and dominance (1 = powerless, 9 = powerful)—and the results are normalized to a -1 to +1 scale, where 0 represents emotional neutrality.

Using a dataset developed for Japanese would be ideal. At the time of writing, several such datasets are under development, but none are completed and available for research use. The closest available dataset is Nakamura's (1993) list of 1,979 expressions classified into 49 different emotions such as *anxiety*, *hesitation*, and *calmness*. However, the limited data size and the fine level of categories makes application of the dataset not practical in our case.

Although the NRC-VAD scores are based on English, studies suggest that VAD dimensions are relatively stable across languages (Mohammad, 2018; Ribeiro et al., 2016). Consequently, researchers examining valence are now using translated lists. For example, De Almeida and Uchida (2018) translated rated English words into Japanese and Portuguese, and then used the translations to compare the valence of approximately 2,464 modern Japanese popular songs and 2,445 Brazilian popular songs. They found that Brazilian lyrics contained significantly more positive words, whereas Japanese lyrics contained significantly more neutral words. In light of this trend, the English dataset was used. While it may miss some cultural nuances, it offers a consistent basis for comparing emotional expression over time.

3.3. Data Extraction

The dataset for this study consists of a subset of JPOP Corpus data. Specifically, I used the 1,250 popular songs released between 1946 and 1970, and the 2,500 enka songs released between 1971 and 2020. This subset contains 593,077 tokens (words and symbols). From this dataset, I extracted all common nouns, non-auxiliary verbs, and adjectives. Adjectives and verbs that were inflected with a suffix were omitted to avoid negated and conditional forms. To make the dataset more manageable, the words were sorted by frequency, and words that occurred fewer than 10 times overall were excluded.

Each word was first translated manually into English. The English equivalent was then matched to a suitable entry in the NRC-VAD Lexicon. This process produced a list of 1,330 nouns, 109 adjectives, and 1,001 verbs. Of these, 1,117 nouns, 79 adjectives, and 911 verbs received VAD scores. Several words had no suitable English equivalent in the lexicon and were excluded. Examples include 素顔 'face without makeup', 意地らしい 'heartwarmingly brave', and 甘える 'be spoiled'. The three most frequently occurring verbs—する, ある, and なる—were also omitted, as they function more as grammatical operators than as lexical content words. Other than these three verbs, the most frequently excluded noun was 浮世 'floating world' (N = 90), adjective was 切ない 'emotionally aching' (N = 239), and verb was 惚れる 'be love-smitten' (N = 394). In total, 83,959 noun tokens (72.56%), 9,069 adjective tokens (94.81%), and 58,487 verb tokens (80.45%) of the extracted tokens were successfully assigned VAD scores. Table 2 shows the 25 most frequent words.

Looking at Table 2, we see that the most frequent noun, 夢 'dream', received a relatively positive

valence score, indicating pleasant associations. However, its arousal score was negative, suggesting calmness, and its dominance score was also negative, implying a lack of control or agency.

Table 2. Frequency Count and VAD Scores for the Twenty-Five Most Frequent Target Words

Rank	Japanese	English	*n*	Valence	Arousal	Dominance
1	夢	'dream'	2,232	0.688	-0.686	-0.344
2	人	'person'	2,061	0.292	-0.274	0.192
3	女	'woman'	1,940	0.114	0.032	0.066
4	心	'heart'	1,935	0.654	0.000	0.386
5	恋	'love'	1,864	0.996	0.334	0.234
6	泣く	'to cry'	1,770	-0.734	0.254	-0.490
7	涙	'tears'	1,700	-0.192	0.240	-0.346
8	花	'flower'	1,677	0.604	-0.622	-0.492
9	男	'man'	1,582	-0.286	0.470	-0.296
10	夜	'night'	1,405	0.196	-0.208	-0.192
11	良い	'good'	1,213	0.876	-0.264	0.068
12	胸	'chest'	1,100	0.04	-0.142	-0.038
13	生きる	'to live'	1,082	0.76	0.346	0.352
14	風	'wind'	1,044	0.062	-0.192	0.156
15	明日	'tomorrow'	1,017	0.584	-0.246	-0.186
16	酒	'alcohol'	1,010	-0.354	0.334	-0.246
17	雨	'rain'	950	0.084	-0.224	-0.340
18	愛	'love'	919	0.996	0.334	0.2340
19	行く	'to go'	818	0.020	-0.118	-0.112
20	来る	'to come'	814	0.058	-0.462	0.116
21	命	'life'	774	0.836	0.230	0.648
22	幸せ	'happiness'	753	0.920	0.464	0.700
23	今	'now'	747	0.226	-0.164	0.032
24	今日	'today'	643	0.612	-0.388	-0.276
25	海	'sea'	604	0.666	-0.294	0.178

3.4. VAD Results

To calculate average valence, arousal, and dominance scores for each time period, I used a weighted mean. Each noun's VAD score was weighted by its relative frequency (occurrences per 1,000 words) in that period. The formula is:

$$\text{Score}_{period} = \frac{\sum_{i=1}^{n} f_i \cdot s_i}{\sum_{i=1}^{n} f_i}, \text{where:}$$

n = 2,107; the number of words included in the study
f_i = relative frequency of word i in period (per 1,000 words)
s_i = VAD score of word i (valence, arousal, or dominance)

This method gives greater weight to frequently used words, allowing them to shape the emotional profile of each period more strongly than less frequent words.

Figure 1 shows the valence, arousal, and dominance scores by five-year period. Two of the scales—Arousal and Dominance—show significant upward trends over time: Arousal, $r(13) = .788$, $p < .001$; Dominance, $r(13) = .908$, $p < .001$. In contrast, Valence does not exhibit a significant trend: $r(13) = -.270$, $p > .10$. These results suggest that Japanese lyrics have become more emotionally intense over time but

have not become more negative. Thus, the findings only partially support the hypothesis that Japanese lyrics—like English ones—are becoming both more negative and more emotionally intense over time, at least in the case of enka.

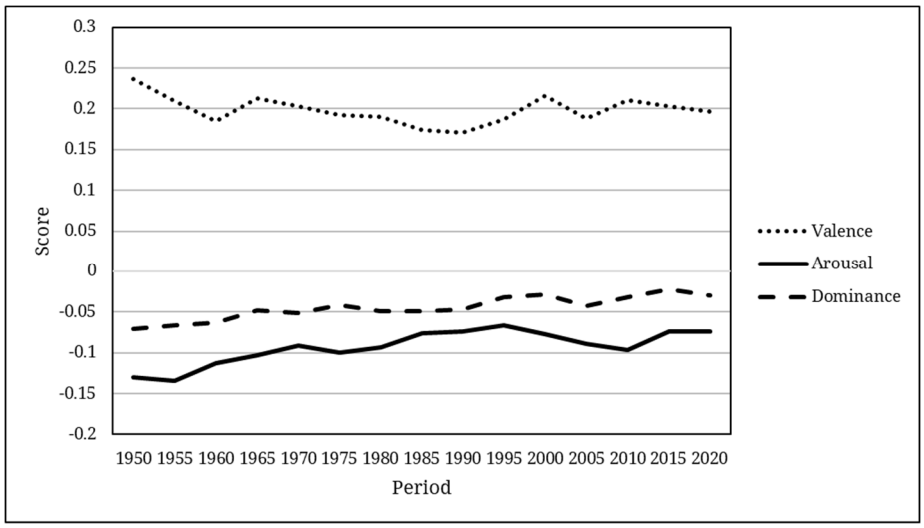

Figure 1. Valence, Arousal and Dominance Scores by Five-Year Period

3.5. Comparing Enka with Other Genres

This section compares the enka results presented in Figure 1 to those from the three other genres included in the JPOP Corpus: hip hop, popular, and rock. The primary aim of the JPOP Corpus is to investigate ongoing diachronic changes in the four music genres. However, at the time of writing, the data for the genres other than enka are still under construction. Currently, only the data for the 2016 to 2020 period has been completed for all four genres. Therefore, this section compares valence, arousal, and dominance scores for lyrics sampled from the five-year period ending in 2020. The objective is to answer the question: Do the valence, arousal, and dominance scores of enka notably differ from those of other genres?

The methodology used to gather the enka data was extended to include the datasets for the other genres during the target time period. Since only words that occurred at least ten times were included, this methodology may have resulted in the omission of several words that would have otherwise been included if the data collection had been completed as outlined in Table 1. Examples of such words that were excluded include ストリート 'street', 刺激 'stimulus', and 無限 'infinity', all of which occurred nine times during the target period. The final list of words with VAD scores was expanded by 398 words (260 nouns, 16 adjectives, and 122 verbs).

For each genre, the weighted mean scores for valence, arousal, and dominance were calculated. The results are presented in Table 3. As seen in Table 3, the scores across all genres are generally similar. All genres have a positive valence score, a slightly negative arousal score, and a dominance score close to zero. Furthermore, the slight differences in scores between genres follow expected patterns. Popular music shows the most positive (or least negative, in the case of negative scores) scores for all three measures, while enka displays the most negative scores. These findings reflect the tendency that popular music is upbeat and energetic, whereas enka music is melancholic and subdued. Thus, in conclusion, the valence, arousal, and dominance scores for enka differ only slightly from the other genres, and in expected directions.

Table 3. Valence, Arousal and Dominance Scores for the Four Genres for the 2016–2020 Period

Genre	Valence	Arousal	Dominance
enka	0.196	-0.074	-0.030
hip hop	0.208	-0.073	0.016
popular	0.257	-0.060	0.034
rock	0.237	-0.061	0.031

3.6. Ongoing Changes in Semantic Categories

To better understand the diachronic changes shown in Figure 1, I grouped the words into semantic categories. These categories were chosen based on familiarity with the dataset and reflect recurring themes in the lyrics. Table 4 lists of categories and examples.

Table 4. Semantic Categories, Proportion the Common Nouns in the Category, and Examples

Category	Proportion	Examples
Body & Clothing	7.6%	手 'hand', 靴 'shoes', 若い 'young', 寝る 'sleep', しびれる 'numb'
Emotions	22.7%	涙 'tears', 'loneliness', 悲しい 'sorrow', 慌てる 'be panicked'
Fate & Mortality	4.2%	運命 'fate', 神 'god', 縁 'karma', めでたい 'congratulatory', 死ぬ 'die'
Motion	6.3%	汽車 'train', ワルツ 'waltz', 向かう 'turn toward', 流れる 'flow'
Nature	12.3%	猫 'cat', 空 'sky', 寒い 'cold (day)', 咲く 'blossom', 曇る 'be cloudy'
People & Relationships	14.6%	恋人 'lover', 絆 'bond', 祭り 'festival', 誘う 'invite', 会う 'meet'
Sensory	5.0%	赤 'red', 光 'light', 香り 'scent', 臭い 'smell bad' 揺れる 'shake'
Space & Time	12.3%	町 'town', 部屋 'room', 今 'now', 遠い 'far', 夜 'go over
Other	15.1%	
Total	100.0%	

The rate of use per 1,000 words was calculated for each five-year period. The Pearson *r* correlation coefficient was then calculated to determine the strength and sign of the correlation between rate of use and time period. This *r* coefficient provides a straightforward and easily interpretable indicator of ongoing change. The results are listed in Table 5. The results are presented sorted in order from the lowest coefficient to the highest coefficient.

The results shown in Table 5 reveal significant changes in the themes of enka lyrics over the past 75 years. Words related to nature and the five senses—for example, 風 'wind' 香る 'smell nice'—are decreasing. At the same time, the frequency of words related to relationships, emotions, and themes of life and destiny—such as 愛 'love', 涙 'tears', and 運命 'fate'—is increasing.

Taken together, the results presented in Figure 1 and Table 5 suggest a coherent pattern. Figure 1 shows that expressions of arousal and dominance are increasing, implying a greater emphasis on internal emotional states and personal agency. In the past, enka lyrics often relied on external imagery. Today, writers appear more likely to write introspective songs focused on internal feelings. Similarly, Table 5 shows that words about the writer's external world—sights, sounds, smells, nature, and motion—are decreasing. In contrast, words about the writer's internal world—relationships, emotions, and fate—are increasing.

This shift is illustrated by the lyrics shown in Figures 2, 3, and 4, which present examples from the pre-enka era (Figure 2), early enka era (Figure 3), and modern enka (Figure 4). All of the songs share the same theme—breaking up with someone—but convey it in different ways. The pre-enka lyrics rely on vivid sensory imagery, such as blurred lights and the sound of a foghorn. In contrast, the later lyrics emphasize the emotional bond between two people and their shared experiences. The later lyrics still include sensory imagery, which remains an essential element of the genre. However, alongside images of patterned umbrellas and blurry lights, we also hear expressions of kindness, loneliness, and regret.

Table 5. Correlation between Rate of Usage and Time Period by Semantic Category

Category	*r*	*p*	Diachronic Trend Description
Sensory	-.522	.046	Rapidly decreasing
Nature	-.484	.068	Moderately decreasing
Motion	-.455	.088	Weakly decreasing
Space & Time	.105	.711	No meaningful change
Body & Clothing	.299	.280	Weakly increasing
People & Relationships	.437	.104	Moderately increasing
Emotions	.653	.008	Rapidly increasing
Fate & Mortality	.966	.001	Rapidly increasing

3.7. Study 1 Concluding Remarks

The results do not support the hypothesis that Japanese lyrics are becoming more negative over time. This finding is not surprising, given that low-arousal states are typically idealized in Japanese culture (Tsai, 2007). Cultural values shape emotional norms: East Asian cultures, including Japan, tend to prefer low-arousal positive emotions such as calmness, serenity, and peacefulness, whereas Western cultures often favor high-arousal emotions like excitement and enthusiasm. Since song lyrics are cultural products intended to resonate with listeners, they generally reflect these values.

In the case of enka—closely tied to traditional Japanese ideals and emotional restraint—the dominant emotional tone has long centered on low-arousal states such as sadness, longing, and quiet endurance (Yano, 2000, 2002). Therefore, a measurable rise in arousal, even within enka lyrics, may suggest not only a shift in emotional expression but also a deeper change in Japan's emotional ideals.

4. Study 2: An A.I. Study of Sentimental Change

4.1. Objective

This section addresses some of the limitations of Study 1 by presenting a new analysis focused on sentiment. Sentiment refers to the emotional tone conveyed in a piece of communication, such as a public speech, advertisement, or online review. Like the valence dimension used in Study 1, sentiment is measured along a continuum from negative to positive (Liu, 2012).

The key difference lies in scope: valence scores apply to individual words, while sentiment scores assess larger units. In this study, sentiment is measured at the level of lyric chunks—the smallest segments of lyrics that convey a coherent emotional idea, usually centered around a verb or image.

Although some researchers recommend analyzing specific emotions such as anger or joy (Mohammad, 2016), this study focuses solely on overall positivity or negativity. This simplified approach enables broader coverage, allowing analysis of more than 40,000 lines of data.

The next section explains the scoring method and dataset in more detail.

Code: JPp01_66970[1]	Artist: Takamine Mieko
Title: 別れのタンゴ	Farewell Tango
別れの言葉は 小雨の花か	Are parting words like blossoms in the rain?
さようならと濡れて散る	They fall and scatter, wet with goodbye
あつい情けに泣いたあの夜も	That night I wept in your warm embrace
はかない一夜の露か	Was it no more than dew for a single night?
Code: JPp03_46961	Artist: Miura Kôichi
Title: 釧路の駅でさようなら	Goodbye at Kushiro Station
口紅いろの 赤い灯が	Lipstick-colored red lights
挽歌の街に 滲む頃	Blur across this elegy-filled town
霧笛の音も 泣くような	Even the foghorns seem to cry
釧路の駅でさようなら	Goodbye at Kushiro Station
Code: JPp03_74148	Artist: Sone Shirō
Title: 夕焼け地蔵さん	Roadside Shrine Beneath the Setting Sun
雁よ故郷が恋しかろ	Wild geese, you must miss your hometown
林檎色づきゃヨーまた想い出す	When the apples ripen, I remember again
つらい別れの段々畠	The painful farewell by the terraced fields
涙いろした月が出る	A moon tinted with tears begins to rise

Figure 2. Examples of Pre-enka Era Lyrics

Code: JPe06_15808	Artist: Pedro & Capricious
Title: 別れの朝	The Morning of Parting
別れふたりは	Parting, the two of us
さめた紅茶のみほし	Drank the cold tea to the last drop
さようならのくちづけ	Exchanged a farewell kiss
わらいながら交わした	Smiling as we did so
Code: JPe06_56857	Artist: Ōkawa Eisaku
Title: 赤い酒	Red Wine
あきらめますと悲しい嘘を	“I’ll let you go”—a sorrowful parting
ついて別れた恋でした	It was love, ended with a lie
燃えて乾いたくちびるに	My lips still burn and remain dry
みれんがしみる赤い酒	Regret, drowned in red wine
Code: JPe08_04384	Artist: Yashiro Aki
Title: ブルーレイン大阪	Blue Rain in Osaka
別れ上手な人がいる	Some are good at saying goodbye
女ごころを本気にさせ	You awakened true feelings in a woman’s heart
追いかければ 逃げてゆくわ	I chased; you slipped away
ああだけど憎めない	Ah… and yet, I can’t hate you

Figure 3. Examples of Early Enka Lyrics

[1] Each song is assigned a unique identifier code. The code consists of the following parts: JP + genre (e: enka; h: hip hop; p: popular; r: rock) + period + _ + random five-digit number.

Code: JPe13_25271	Artist: Sandaime Columbia Rose
Title: 城下町ブルース	Castle Town Blues
あなたと別れる かなしさに	Sadness settles as I part from you
雨の上田の 灯も濡れる	Even Ueda's lights are blurred with rain
一夜かぎりの やさしさと	It was kindness meant to last one night
知っていながら 夢をみた 袋町	Still, I dreamed of love in Fukuromachi
Code: JPe14_87370	Artist: Matsubara Nobue
Title: 能登みれん	Regret in Noto
別れた後の 淋しさを	Only after we parted did I feel this loneliness
初めて知った 宵灯り	In the glow of the evening lamps
今日で涙と お別れね	Tonight, I say goodbye to tears
未練ひと粒 捨てに来た	And cast away a single grain of regret
Code: JPe15_68016	Artist: Godai Natsuko
Title: 袖しぐれ	Drizzle on my Sleeve
あふれる 蛇の目の傘に	Beneath the wide-patterned umbrella
隠して別れた 橋の上	We parted, hidden atop the bridge
形も見えない あなたの心	I can no longer see your heart at all
信じる私は 愚かでしょうか	Was I a fool to keep believing in you?

Figure 4. Examples of Modern Enka Era Lyrics

4.2. Assigning Sentiment Scores to the Lyrics

4.2.1. Evaluation of Sentiment with ChatGPT

This study uses the same set of 3,750 songs as in Study 1. The lyrics were processed as follows. First, part-of-speech tags were removed, and each song was reformatted into a single line of text. Breaks in the original lyrics—either line breaks or spaces—were marked with the symbol |.

The reformatted lyrics were then processed using the ChatGPT-4o language model. The model was instructed to divide the lyrics into chunks—short segments that convey a complete emotional or semantic idea. Each chunk typically includes a subject, verb, and object, or a symbolic image. ChatGPT was instructed to make the chunks long enough to support meaningful sentiment analysis.[2] ChatGPT then assigned each chunk a sentiment score ranging from -2 to +2. The full prompt used for this task is provided in Appendix 1.

Output quality was monitored both manually and with Python scripts. Three issues were observed and handled. The first issue was that ChatGPT occasionally ended its output abruptly in the middle of a song. The second issue was that ChatGPT occasionally rated all of the chunks of a song with identical scores. Both of these issues were resolved by repeating the rating process for the problematic song. The third issue was ChatGPT's tendency to omit repeated content when identical chunks appear more than once, despite being instructed to not do so. To address this issue, the output was compared to the original input and missing chunks identified using a Python script. These missing chunks were reinserted by hand.

In total, 3,750 songs were divided into 43,633 lyric chunks, each assigned a sentiment score between

[2] A more transparent method of chunking was attempted using part of speech and the Japanese dependency parser BERTKNP available on GitHub. However, this task proved to be unmanageable. Enka lyrics often contain repetitions, segment fragments, and no-standard word order such as locating the direct object after the verb for affect. The accuracy of the results was so poor, even after several refinements, that such an approach was abandoned.

-2 and +2. Examples are shown in Table 6. The number of chunks per song ranged from 3 to 73, with an average of 11.64.[3] Average sentiment scores were then calculated for each song. These scores ranged from -2.0 to 2.0, with a mean of -0.007. This near-zero average was not intentional.

Table 6. Examples of Lyric Chunks Assigned a Sentiment Score of +2, 0, and -2

Score	Code	Lyric Chunk	Translation
-2	JPp03_75857	俺は哀しい詩人だよ	I am a sad poet.
-2	JPe14_07320	雨がつれ去った恋よ	Oh love, the rain has taken you away.
-1	JPp02_95435	泣いたら燕が笑うだろ	If I cry, the swallows will laugh.
-1	JPe09_65489	あなたなしでは生きられぬ	I can't live without you.
+0	JPp04_05134	何も言わないでちょうだい	Please don't say anything.
+0	JPe12_16795	鴎啼くこえきこえる宿の	At this seaside inn, I hear the cry of seagulls.
+1	JPe06_00634	誰にも故郷がある故郷がある	Everyone has a hometown, a place called home.
+1	JPe15_09150	迷わずに歩けばいい	Just keep walking without fear.
+2	JPe13_63341	心からまた君に恋してる	I have fallen in love with you again from my heart.
+2	JPe14_43492	ほたるみたいな二人の運命	Our fate is like a firefly, shining in the dark.

4.2.2. Comparing Rating Consistency Against Human Raters

One potential concern with impressionistic ratings is inconsistency. To assess the consistency of ChatGPT's ratings and compare them with those of human raters, I conducted a reliability analysis using intraclass correlation coefficients (ICCs). A total of 500 lyric chunks were selected from a larger pool of AI-generated ratings. Specifically, 100 chunks were randomly sampled for each score on a five-point scale ranging from -2 to +2, from the ratings data produced by ChatGPT. These 500 lyric chunks were then rated a second time by ChatGPT. The session was reset, the memory cleared, and the prompt slightly changed to avoid ChatGPT from reusing the same evaluations. In addition, four naïve human raters, with no prior experience in the task, independently rated the same 500 lyric chunks following the same instructions. Human raters were compensated for their participation. To quantify inter-rater consistency, ICCs were calculated using a two-way mixed-effects model (ICC\[3,1]), which is appropriate when the set of raters is fixed (i.e., not randomly sampled) and when the goal is to assess how consistently each item is rated across different raters (Shrout & Fleiss, 1979).

ChatGPT demonstrated higher inter-rater consistency across two independent rating sessions, ICC(3,1) = 0.815, 95% CI [0.783, 0.842], compared to the four human raters, who showed good but lower consistency, ICC(3,1) = 0.656, 95% CI [0.619, 0.692]. Although these results are not strictly comparable (two ratings from the same source versus four independent human raters), the difference is large enough to indicate that ChatGPT produced more stable and consistent ratings than the human raters. This pattern aligns with other research on the use of automated language models in impressionistic evaluation tasks (Lin, Akuhata-Huntington, & Hsu, 2023).

Post-task interviews with the human raters indicated that the task was simple and clearly explained. However, all raters reported difficulty maintaining focus, and two specifically noted that the task quickly became monotonous and tedious. It is worth noting that the human raters became fatigued after evaluating only about 1% of the total dataset, suggesting that manual rating of the full dataset would not be feasible.

[3] The possibility that variation in chunk size may influence sentiment scores was assessed by first calculating the average chunk length for each five-year period. The average length ranged from 16.29 to 22.60, indicating notable variation. However, average chunk length did not correlate with sentiment score, $r(13) = .201$, $p > .10$, suggesting that chunk size does not influence sentiment.

4.3. Results

4.3.1. Average Sentiment Score by Time Period

I calculated the average sentiment score for each five-year period. Figure 5 shows the result. As shown in Figure 5, sentiment scores show a statistically significant increase over time, $r(13) = 0.66$, $p = .008$. This finding is opposite of the first hypothesis.

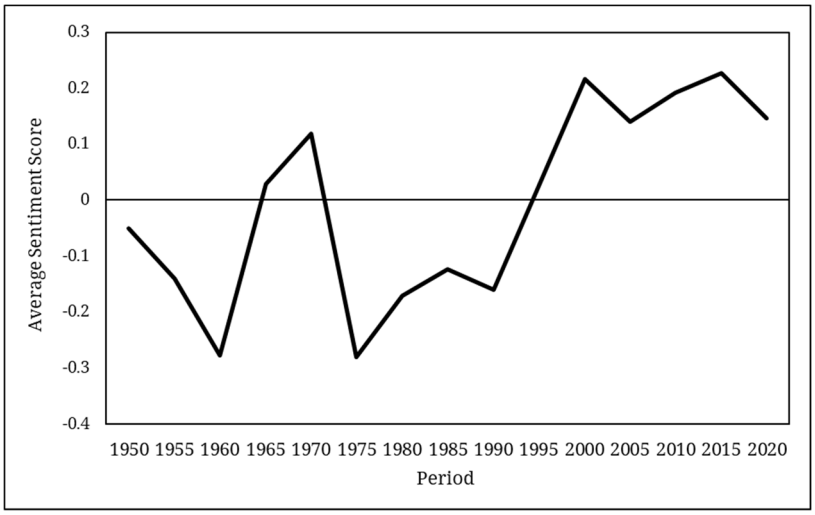

Figure 5. Average Sentiment Score Per Period

4.3.2. Proportion of Songs with Mixed Sentiment by Time Period

This section tests the second hypothesis: that lyrics expressing both positive and negative emotions within a single song have become less common over time. To test this, songs were classified as either showing mixed emotions or not. A song was labeled as mixed if it included at least one chunk with a positive score (+1 or +2) and at least one chunk with a negative score (-1 or -2). Overall, 65.0% of songs met this criterion.

Figure 6 presents the proportion of songs with mixed sentiment by time period. A Pearson correlation assessed the relationship between time period and proportion. The results showed a moderate positive correlation, $r(13) = .41$, $p = .13$, but it was not statistically significant. Therefore, there is no clear evidence that the use of mixed emotions in song lyrics is decreasing over time.

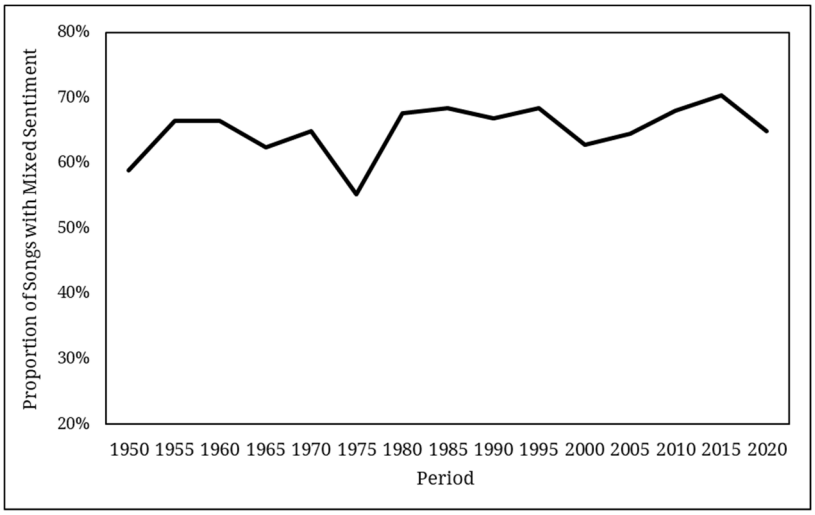

Figure 6. Proportion of Songs with Mixed Sentiment by Period

4.3.3. Connecting the Results to Societal-Level Change

The average sentiment scores shown in Figure 5 show noticeable peaks and valleys. In particular, Figure 5 shows low points in the 1960s, 1980s, and early 2000s. A similar pattern appears in research on English accommodation in American movie titles over a 60-year period starting in 1946 (Heffernan, 2008). In that study, each title was scored from 0 (completely Japanese) to 3 (completely English), based on the number of loanwords, transliterations, and English words. An updated version of this study, covering 75 years appears in Heffernan and Vaage (to appear). Heffernan (2008) suggested that these dips coincide with periods of heightened social tension in Japan—such as the Anpo Protests of the 1960s, the U.S.-Japan Trade War in the 1980s, and the Okinawa Anti-Military Base Protests in the 2000s. Supporting this idea, there is a moderate positive correlation between English-likeness in movie titles and sentiment in song lyrics, $r(13) = .57$, $p = .027$.

This correlation suggests a connection between the adaptation of American movie titles in Japanese and the enka genre. However, there is unlikely to be a direct link between the two—songs in Study 2 contain fewer than 1,655 English words (less than 1%). Instead, both trends most likely reflect broader socioecological changes in Japan. Socioecology examines how environmental and social conditions shape human behavior, thought, and emotion. It emphasizes that psychological tendencies are not universal but vary depending on factors such as population density, residential mobility, and economic structure (Oishi, 2014).

Periods of political unrest and social instability—like the Okinawa protests—often lead to lower perceptions of safety, stability, and collective well-being. Research in cultural psychology suggests these conditions can influence emotional expression, worldviews, and openness to external influences. For example, during times of economic or social stress, people tend to show more conformity, stronger in-group preferences, and resistance to change (Gelfand et al., 2011). In contrast, periods of prosperity and stability often promote emotional positivity, individual expression, and openness to foreign ideas (Oishi & Graham, 2010).

Oishi and Graham (2010) found that people in stable communities reported higher trust and interpersonal warmth, while those in unstable settings expressed more defensive attitudes. Similarly, Oishi (2014) observed that rapid urbanization and political unrest were associated with lower well-being and reduced tolerance for outsiders. From a socioecological perspective, the emotional and linguistic patterns observed in these valleys may be adaptive responses to perceived societal threats.

5. Conclusions

5.1. Summary of Findings

This research used a large-scale corpus of Japanese enka lyrics to examine two hypotheses about cultural change in Japan:

(1) that lyrics are becoming more emotionally negative and intense over time; and
(2) that the use of mixed emotions in lyrics is decreasing.

Neither hypothesis was fully supported. Study 1 showed that valence scores remained flat over time, while arousal and dominance scores increased. Study 2 found that sentiment became slightly more positive over time, and that mixed emotions remained stable.

5.2. Interpretation and Cultural Shifts

The steady increase in arousal challenges the long-held view that Japanese culture emphasizes

emotional restraint. Instead, it suggests a gradual shift in ideal affect—from low-arousal calmness to higher emotional intensity. This trend parallels changes in Western pop music (Brand et al., 2019) and may indicate a broader emotional modernization of Japanese culture. Even in a traditionally restrained genre like enka, norms around public emotion appear to be evolving.

The semantic analysis in Study 1 also revealed a shift in lyric themes—from the external world (nature, sensory experience) to the internal world (emotion, personal agency). The rising presence of relationship terms may help explain the increase in emotional expression. Prior research has shown that Japanese speakers are more likely to express emotion when discussing interpersonal relationships (Uchida et al., 2009).

From a cultural psychology perspective, these trends suggest a move toward greater individualism. But they may also reflect broader cultural transformations. Azuma (2001), for example, argues that contemporary Japanese pop culture is marked by the loss of "grand narratives" and a shift toward "database consumption," where people seek out emotionally satisfying moments rather than follow complete stories with deep meaning. In this light, the introspective turn in enka lyrics could be seen as part of a larger postmodern cultural shift toward fragmented emotional experience, where satisfaction is found through intense personal feelings rather than through shared cultural narratives.

5.3. Broader Implications for Cultural Psychology

Study 2 found that emotional expression in enka lyrics has become slightly more positive over time, and that mixed emotions remain culturally accepted. Importantly, these trends were not linear. Sharp dips in sentiment occurred in the 1960s, 1980s, and early 2000s—periods that also saw reduced English influence in movie titles (Heffernan, 2008; Heffernan & Vaage, to appear) and coincided with major political unrest (e.g., the Anpo protests, U.S.–Japan trade tensions, and Okinawa anti-base protests).

These shared inflection points suggest that broader societal conditions may shape emotional expression. Socioecological psychology provides a useful framework here. During periods of instability, people may become more cautious, less expressive, and more resistant to outside influence (Oishi, 2014; Gelfand et al., 2011; Oishi & Graham, 2010).

Interestingly, the two studies revealed different temporal patterns. Study 1's VAD-based measures showed slow, gradual shifts, while Study 2's sentiment analysis revealed quicker responses to short-term societal changes. This distinction mirrors patterns found in other social domains shaped by human cognition. In language, for example, some changes, such as adopting prestigious forms like *whom*, are deliberate and norm-driven. Others, such as the spread of forms like *gonna*, emerge gradually through repeated use (Labov, 2001).

Consumer behavior shows a similar divide. As Berger and Heath (2007) demonstrate, people often buy visible, high-status items—such as designer clothes or luxury electronics—to signal group identity or conform to social expectations. These purchases are especially common in contexts where social norms are strong and behavior is easily observed, suggesting that consumer choices can rapidly shift in response to changing attitudes or prestige cues.

In contrast, other aspects of consumption evolve more gradually and unconsciously. For example, habits such as product packaging preferences, brand loyalty, or design aesthetics may change slowly over time through repeated exposure, imitation, and convenience rather than through active decision-making. This distinction mirrors the two patterns observed in enka lyrics: one shaped by top-down, socially visible shifts in emotional norms, and the other by bottom-up, habitual changes in expressive style.

These parallel patterns point to a broader conclusion: cultural change may be shaped by two complementary mechanisms. Prestige-driven (top-down) shifts reflect sensitivity to social norms and public visibility, while usage-driven (bottom-up) changes emerge gradually through repetition and imitation. Together, these forces suggest that shifts in Japanese lyric content mirror broader social

processes, linking cultural expression with both deliberate and habitual dynamics. These findings provide a foundation for exploring how such mechanisms operate across other musical genres and cultural domains.

5.4. Limitations and Future Directions

This study has two key limitations. First, the analysis is restricted to enka lyrics, as the other genres in the JPOP Corpus (pop, rock, and hip hop) are still being compiled. While enka offers a useful lens for examining long-term emotional and cultural trends—given its strong ties to postwar identity and tradition—it does not represent Japanese music or, consequently, Japanese culture as a whole. Future research will incorporate all four genres to provide broader and more representative conclusions. Second, song lyrics, although valuable as cultural products, are intentionally crafted by lyricists and shaped by commercial and genre conventions. As such, they may reflect both cultural preferences and the creative or marketing decisions of the music industry, rather than offering a purely organic record of shared emotional values.

Despite these limitations, the patterns observed here contribute to our understanding of cultural change in Japan. The results reveal two distinct processes: one shaped by short-term, socially visible shifts and another emerging gradually through habitual use. These parallel dynamics mirror patterns observed in language change, suggesting that both linguistic and cultural evolution may be driven by similar top-down and bottom-up forces. Incorporating the remaining genres of the JPOP Corpus in future work will test whether these processes extend beyond enka and shed further light on how music reflects and shapes Japanese cultural expression.

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Appendix

Appendix 1. ChatGPT Prompt for a Sentimental Analysis of Japanese Lyrics

Sentiment Analysis Instructions

1. Chunk Refinement
   Recombine segments into meaningful chunks long enough to convey sentiment. Keep verbs, subjects, and objects together. Avoid splitting phrases or separating dependent elements. If a chunk is too short, append the next one and reassess. Do not omit any input. For meaningless katakana sequences, assign a score of 0.

2. Sentiment Scoring
   Score each chunk as follows:

   -2 (Very negative): death, despair, hatred, destruction
   -1 (Negative): loneliness, sadness, loss, frustration
   0 (Neutral): observation, description, fact
   1 (Positive): warmth, satisfaction, hope, admiration
   2 (Very positive): joy, love, triumph, peace

   Use both literal and symbolic interpretation. Emotional metaphors or imagery (e.g., 花 for joy, 長いトンネル for hardship) should be scored appropriately, even without emotion words. Combine symbolic and explicit cues (e.g., 信じる笑顔) for higher scores.

   Examples:
   > 咲くこの町でもいちど逢いたい: 2 (triumphant, longing fulfilled)
   > 蒼く咲いたバラ: 1 (poetic image of beauty and admiration)
   > 崩れ落ちた夢の”: -1 (symbolic loss or disappointment)
   > 赤い鼻緒の下駄はいて: 0 (descriptive)
   > また焦がす…: -1 (regret)

3. Input Format
   Each entry has a code and chunks separated by |.
   Example:
   JPe08_00052|君は遥けき相模灘|漁り灯よりも|遠き人|さらば情けの|江の島の|みどり哀しき|わが恋よ

4. Output Format
   Plain text only. Each line must include:
   code, full chunk, score
   Example:
   JPe08_00052,君は遥けき相模灘漁り灯よりも遠き人, -1
   JPe08_00052,さらば情けの江の島のみどり哀しきわが恋よ, -1
   JPe08_00052,南風の潮路の流れ藻に明日は真白き花と咲け, 2

5. General Rules
   Output every part of the input. No omissions.
   Repeated or meaningless segments (e.g. だから...) must be included and scored (typically 0).
   Final short or meaningless sequences: combine or score as-is with 0.
   Score accurately and consistently.

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