

Analysis of Japanese Animation Dialogue Level using Japanese Expressions



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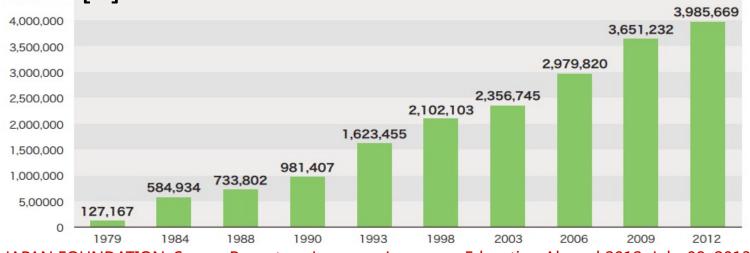
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Introduction

More and more people choose to learn Japanese as a foreign language (JFL Learners). Early in 2012, there were nearly 4 million people (9.2%) increased than 2009) are studying Japanese abroad (means not in Japan), and 16 thousands of Japanese educational organizations, and

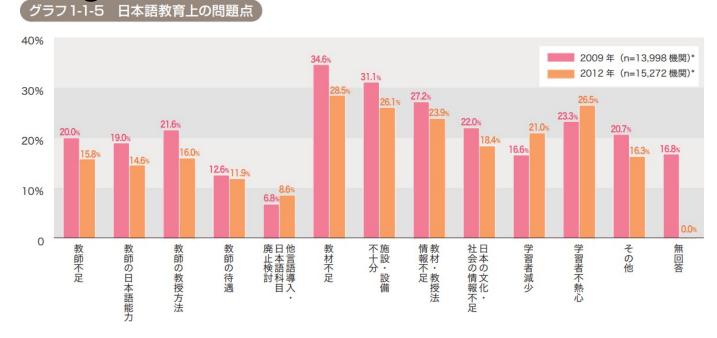
64 thousands of teachers [1].



[1] JAPAN FOUNDATION, Survey Report on Japanese-Language Education Abroad 2012, July, 08, 2013

AProblems in Japanese Learning

- 1. Inadequate Teaching Materials.
- 2. Training of Listening & Speaking ability.
- 3. Standard Pronunciation
- 4. Insufficient interest among learners.





- The quantity of Anime is large.
- Anime owns lots of visible motion pictures.
- Dialogues in Anime have standard pronunciations.
- Anime is interesting to attract learners' attentions.



Relationship between JFL learners and Anime [1].

Anime could help to improve JFL learners' Multiliteracies [2].

New teaching method via Anime attracted learners' interest [3].

All these researches have showed positive signals about using anime as Japanese learning materials. But barely of them have put forward a **concrete scheme** about how to utilize those large quantity of anime as Japanese learning materials for the various students with different degrees and different demands.

^[1] Kumano. 日本語学習者とアニメ・マンガ~聞き取り調査結果から見える現状とニーズ~[J]. Bulletin of the Hiroshima University International Student Center (20), 2010: 89-103.

^[2] Fukunaga. "Those anime students": Foreign language literacy development through Japanese popular culture[J]. Journal of Adolescent & Adult Literacy, 2006, 50(3): 206-222.

^[3] Yazaki. Development of "Anime-de Nihongo" Japanese Learning Activities with Anime: Examples from the Classes for Young JAL Learners[J]. Bulletin of the Shizuoka University International Center, 5: 57-74, 2011.



Japanese Levels

4-Levels division in JLPT

JAPAN FOUNDATION (JPF) had formulated 4 levels of Japanese Language Proficiency Test (JLPT), which is the global universal Japanese language examination. L4 is the primary, L1 is the most difficult, each level owns corresponding knowledge points.

Japanese Expressions in 4-Levels division

L4: As the primary level, expressions in L4 is not major and almost need to cooperate with the higher levels.

L3: Regarding the daily conversations.

L2: Writing and formal usages.

L1: Classical and ancient usages or some specific expressions.

Table 1. Number of expressions in each level.

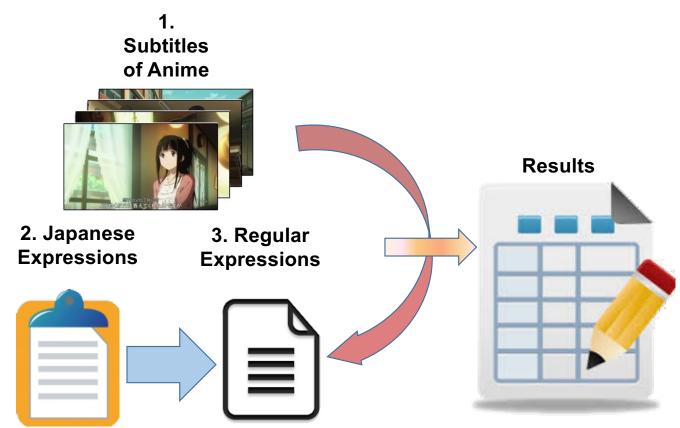
Level	L3	L2	L1
# of expressions	108	177	105

	Level	Criteria			
	1	The examinee has mastered grammar to a high level knows around 2,000 <i>kanji</i> and 10,000 words, and has an integrated command of the language sufficient fo life in Japanese society. This level is normally reach after studying Japanese for around 900 hours.			
	2	The examinee has mastered grammar to a relatively high level, knows around 1,000 <i>kanji</i> and 6,000 words, and has the ability to converse, read, and write about matters of a general nature. This level is normally reached after studying Japanese for around 600 hours and after completion of an intermediate course.			
knows around 300 <i>kanji</i> and 1,500 ability to take part in everyday corread and write simple sentences. Treached after studying Japanese for		The examinee has mastered grammar to a limited level, knows around 300 <i>kanji</i> and 1,500 words, has the ability to take part in everyday conversation and to read and write simple sentences. This level is normally reached after studying Japanese for around 300 hours and after completion of an elementary course.			
	4	The examinee has mastered the basic elements of grammar, knows around 100 kanji and 800 words, has the ability to engage in simple conversation and read and write short, simple sentences. This level is normally reached after studying Japanese for around 150 hours and after completion of the first half of an elementary course.			



Analysis Method

- 1. Subtitles of Anime.
- 2. Lists of Japanese expressions.
- 3. Regular Expressions of Japanese expressions.





Data of Analysis

1. Regular Expression of Japanese Expression.

- 1, Regular expressions could match different forms of Japanese expressions.
- 2, Regular expression could deal with the large quantity of data set efficiently.
- 3, We made lists using regular expressions contained every Japanese expressions for each level.

2 .Texts of Anime Subtitle.

- 1, We collected several anime with 3 genres.
- 2, We made subtitles' texts of these anime.

Table 3. Used texts of animation subtitles.

	Genre	Name	# of episodes	# of lines in texts
f	Battle	Fate Zero	25	7752
		Attack on Titan	25	6940
	Daily Life	K-ON 1	13	5041
		K-ON 2	24	10494
		Is Order Rabbit	12	4311
	Multiple	Hyōka	23	9186
		Fate Stay Night	24	6696

Table 2. Examples of Regular Expressions for Japanese expression in each level

expression in each level.			
Level	Regular Expressions of Japanese		
Level	expression		
	([^ん]て [んい]で)あ[るりっ]		
	([^んく]て [んい]で)も[良いよ]い		
L3	([^ん]た [んい]だ)まま		
	を[呉く]れ[るまてたなれらよ]		
	かも[知し]れ(な[いか] ません)		
	として[はもの]?		
	に([置於お]いて[はも]? [置於お]ける)		
L2	(次第 しだい)(だ で[すは]?)		
	[ただ](途端 とたん)に?		
	(恐 おそ)れがあ(る り って った)		
	.+がてら		
	.+かたがた		
L1	ただ.+のみならず		
	とは[言い]え		
	.+んばかり(だ に の です でした)		



Result of Statistics

Table 4. Summary of analysis.

Anime Name & Genre		Counts of Each Level Expressions		
Genre	Name	L3	L2	L1
	Fate Zero (25)	4045 (56%)	2675 (37%)	491 (7%)
Do44lo	POE	89.8%	73.4%	46.7%
Battle	Attack on Titan (25)	4237 (64%)	2124 (32%)	236 (4%)
	POE	87%	71.2%	30.5%
	K-ON 1 (13)	2264 (77%)	580 (20%)	82 (3%)
	POE	81.5%	35%	18%
D.:1., I :f.	K-ON 2 (24)	5187 (77%)	1334 (20%)	215(3%)
Daily Life	POE	87%	52.5%	33.3%
	Is Order Rabbit (12)	2334 (77%)	643 (21%)	75 (2%)
	POE	79.6%	41.8%	18%
	Hyōka (23)	5882 (68%)	2425 (28%)	339 (4%)
Multiple	POE	94.4%	64.4%	41%
Multiple	Fate Stay Night (24)	3966 (67%)	1710 (29%)	211 (4%)
	POE	89.8%	66.1%	30.5%
Average	e of level's proportion	69.4%	26.7%	3.8%

POE: Proportion of Occurred Expressions.

The proportion of how many kinds of expressions were occurred from the total items of expression this level owns.



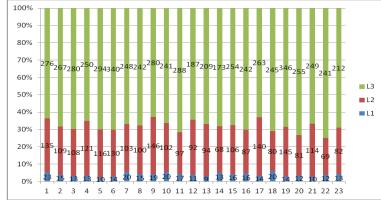


Table 5. Top 10 Expressions in Hyōka

Expression	# of Occurrences	Level
~んです	628	L3
~ても	426	L3
~じゃ ちゃ	421	L3
~ている	400	L3
~上	392	L2
~く になる	252	L3
~だろう	252	L3
~から	235	L3
~なら	231	L3
~だけ	226	L2



1. Dialogues in Anime consisted of every levels' expressions.

Whatever the anime is, its dialogue contained every levels' expressions. This result confirmed that we really could use anime with training Japanese expressions.

2. L3 is the most commonly used expressions than others.

The last line in Table 4 shows the rate of L3 is 69.4% which is the highest, means L3 is the most commonly used expressions in conversations. L2 also has 26.7%, but the rate of L1 is just 3.8%. The learners who would like to promote their speaking capability should take more focus on the expressions in L3 and L2.

3. Atmosphere would affect the style of dialogue.

The proportion of expressions in L2 and L1 in battle genre are higher than the daily life. That means in a more serious dialogue environment like battle story, the formal expressions will become more frequently. And in daily life dialogues, relaxed and easy expressions in L3 will usually be chosen.

4. Daily life Anime usually easier than Battle genre.

The POE also indicated a similar result about the difficulty in different genre of anime. We could use this to sequence the anime with their content's degree. And obviously, a daily life genre anime is the good choice for primary learners.



1. Using expressions' rate to distinguish anime's degree

With the genre's difference, the proportion of expressions in each level is also different. We could use this as the index to sequence the degree of anime's content.

2. Recommend suitable anime to learners.

Expressions in L3 and L2 are the major in every animation. The learners who would like to promote conversation capabilities should focus on these two levels. Especially for primary learners, anime with more expressions in low level and less in high level will be recommended.

Thank You Very Much!