Data-visualization and new literacies: new methods for video remixes analysis

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Abstract

This article introduces audiovisual data-set, and data-visualization methods developed to analyze video remixes, i.e., Anime Music Videos (AMVs). It mainly focuses on reviewing the methodology that has supported our Ph.D. thesis which aims to integrate a qualitative methodology according to Bakhtin's theories of genre and architectonics, and a quantitative methodology based on media visualization techniques and statistical distributions of formal and stylistic choices. More specifically, it aimed to reflect upon on audiovisual productions belonging to the site http://www.animemusicvideos.org/. Community whose goal is the elaboration and distribution of Japanese animations remixes called Anime Music Videos (AMVs). We propose to integrate an enunciative-discursive perspective, formulated for verbal language with an analysis objective method of multimodal objects. Hence we suggest a mixed research design (quantitative and qualitative) based on statistical distributions and description and analysis of our data visualization techniques, aiming to reveal relationships and patterns in our collection of audiovisual data, so as to provide productive transitions between the concepts proposed by Bakhtin and his Circle, and analysis of editing and video editing tools.

Keywords: *Anime Music Video (AMV), Remix Studies, Media Visualization, Architectonics, New Literacies*

1. Anime Music Video (AMV): remix and new literacies

Remixes based on video edition is part of youth cultures: it constitutes a new practice of multilingual and multimodal literacy that includes new values, new aesthetics and new ways to create and share meanings (LANKSHEAR, 2007; LANKSHEAR AND KNOBEL, 2011; NAVAS, 2012; 2013; 2015). For this reason, it is important to recognize the nature that defines the new ways in which young people construct and share meanings in the contemporary world to have a better understanding of how youth cultures establish, through new literate practices, their networks, sociability, aesthetics and professionalization processes.

The video Safety Dance[1] is an interesting example of these New literacies that circulate within youth cultures; primarily, between fans of Japanese pop culture.

Safety Dance was edited by Shin, a well-known AMV editor, who had won the 2012 "Viewer's Choice Awards (VCA) for "Best Dance Video" and "Best Video That Made You Want to Watch the Anime" – VCA is an import price given by the AMV portal the.org to, as it says, "acknowledge the videos that stand out above and beyond the rest of the video crowd."[2]

According to Shin, this remix is not "so original", but it has, certainly, given him a good reputation in the community: as he emphasizes, Safety Dance was very well appreciated by the online community.

[1] Available in: <https://www.youtube.com/watch?v=ilKYcmoQ02w>, (accessed: 03 March 2019).
[2] Available in: <https://www.animemusicvideos.org/members/amvvca/>, (acessed 21 December 2018).

> Probably not the most original concept, but it was fun to put together. This was my AWA master's entry and while it didn't win it sounded like the crowd enjoyed it and that's all that really matters in the end[3]. (SHIN, 2011)

Shin remixed Safety Dance by the band Men Without Hats with scenes from Nichijou in order to become active in the AMV community, in which he succeeded. AMVs like Safety Dance are an example of remix based on video editing: they are new creations built by a combination of materials borrowed from various Japanese animations (Anime) and assembled with music in a video-clip. They follow traditions related to otaku culture and result from the dialogue between Western pop culture and Japanese pop culture.

They are, as stated by Mizuko Ito (2012), a concrete representation of transnational cultural flows. During the production of an AMV, the editor not only handles a semiotic and linguistic repertoire hybridizing cultural references (Japanese animation and Western pop song) but also shows the mastery of the audiovisual language required to produce a video remix.

In a very particular way, different from other video remix communities (*e.g.,* Fan Vid, Political Remix, etc.), the AMV community organize itself around a portal known as the.org (www.animemusicvideos.org/). At the.org, participants promote competitions, meetings, multi-editor projects (MEP), forums, interviews with AMV editors, guides, and tutorials on editing videos that provide essential learning experiences within the community. For instance, AMV's tutorials help participants not only to master video creation and editing techniques but also to acquire key aesthetic learnings, theories, and concepts that guide the community.

Typically, AMV's tutorials and guides to video editing and remix techniques at the.org divide topics in three parts: sync, concept, and effects. The synchronization is pointed out as a crucial aspect in the creation of a good AMV: through an editing process that produces proper sync between music, letter, and mood of original material, editors can materialize different categories of AMVs - horror, drama, humor, and action. Consequently, we intend to integrate a qualitative methodology according to Bakhtin's theories of *genre* and *architectonics* (BAKHTIN, 2010[1934-35/1975]; 2003[1952-53/1979]; MEDVIÉDEV, 2012[1928]; VOLOCHINOV, 2009[1929]) and a quantitative methodology based on media visualization techniques and statistical distributions of formal and stylistic choices (MANOVICH, 2010; 2011; NAVAS, 2012; 2013; 2015).

2. Theoretical-methodological development

The fundamental purpose of this article is to reflect upon some new literacies and multilingual practices related to AMV productions. Therefore, we will refer to methods and analysis procedures for video remixes, focusing on the review of our Ph.D.'s thesis results, linked to the area of concentration Language and Education in Applied Linguistics Program.

The referred thesis aims to analyze three relevant remix videos, produced by influential AMV editors and created from the same Japanese animation (Anime) - Tengen Toppa Gurren-Lagann: Flash! (humor); Written in the spirals (action) and La tristesse durera toujours (drama) – and to outline a Bakhtinian

[3] Shin, 2011. Available in: <https://www.animemusicvideos.org/>, (acessed 21 December 2018).

framework of analysis for remix videos that can provide directions for construction of pedagogic parameters centered on the conception of Pedagogy of Multiliteracies (New London Group).

During the development of this research, it was proposed to work for six months – from September 2017, until February 2018 – under the supervision of professor Eduardo Navas, Ph.D., as a Visiting Scholar at the Arts & Design Research Incubator (ADRI), in order to improve, exchanged and deepened the understandings and knowledge on media visualization techniques and on remix studies. During this stage, was adopted the methodological model proposed by Manovich and Navas (MANOVICH, 2010; 2011; NAVAS, 2012; 2013; 2015).

The different visualization techniques developed allowed us to create images and graphs that revealed relationships and patterns existing in the AMV's audiovisual dataset.

The use of image processing software enabled us to evaluate certain visual elements of a video and to compare them with any other. Software such as ImagePlot helped us understand what is typical and what is unique in a given data set and to identify common characteristics and similar patterns between them.

However, in order to create proper conditions for submitting the research *corpus* to media visualization procedures that could correspond to the thesis's goals, one had to add some steps to the proposal developed by Manovich (2010; 2011).

Before moving to what he calls "digital processing" and "visualization" moments, we prepared all AMVs selected according to procedures already used by Digital Humanities and Corpus Linguistics, such as the elaboration of controlled vocabulary and part-of-speech tagging (BERRY, 2012; HUNSTON, 2002; SARDINHA, 2004; SMIT, KOBASHI, 2003).

Therefore, we divided the visualization techniques procedures into three stages: (1) tagging, (2) digital processing, and (3) exploratory data analysis, as follows.

2. 1 – Tagging visual features

During this stage, we split the AMVs selected into frames and sequences of images with the aid of a video editor (Adobe Premiere Pro). During this process, all images/frames are intitled, numbered, and grouped automatically into folders separated by AMVs titles.

For instance, the first frame of the Flash! The video was entitled "flash_001" and filed inside a folder named "Flash_Frames." Then, by the assistance of a digital asset management software (Adobe Bridge), each frame received tags that in the future have allowed the research corpus to be processed and analyzed in different sets of images and visualized into different layouts or, according to the research goal, established the frequency of certain tags within the data set.

Therefore, according to the thesis particularity, it was necessary to define some criteria for tagging the *corpus*. Thus, two significant keywords groups were established based on Bakhtin's theory of speech gender[4]: the first one, in a certain way, was linked to the concepts of thematic content; and the second one was related to compositional form.

[4] According to Bakhtin "speech genres" are "*relatively stable types"* of utterances that reflect the specific conditions and goals of a particular sphere of communication "not only through their content (thematic) and linguistic style, that is, the selection of the lexical, phraseological, and grammatical resources of the language, but above all through their compositional structure." Bakhtin, M. *Speech Genres*: Other Late Essays. Austin, TX: University of Texas Press, 1986, pp. 60-63.

Through tools offered by the software Adobe Bridge, each frame received a thematic content tag (*e.g.*, Kamina, Yoko, Simon, Mechas, Spiral King, and Beastmen) and a compositional form tag (*e.g.*, close-up, medium shot, long shot). We prioritize the scale variation, and the characters because visual data and features such as luminosity, saturation, hue, line, number, and shapes could be automatically processed and digitally quantified by software like ImagePlot.

Hence, it was adopted the shot scale as Barry Salt proposes in *Statistical Style Analysis*[5].

> *Big Close Up (BCU) shows head only, Close Up (CU) shows head and shoulders, Medium Close Up (MCU) includes body from the waist up, Medium Shot (MS) includes from just below the hip to above the head of upright actors, Medium Long Shot (MLS) shows the body from the knee upwards, Long Shot (LS) shows at least the full height of the body, and Very Long Shot (VLS) shows the actor small in the frame*. (Salt. B. Able in: <http://goo.gl/YthDg5>, accessed: 03 March 2019).

For instance, the seventh frame of the AMV *La tristesse durera toujours* - tristesse007.jpg, an image of the character Kamina in Big Close Up (BCU) – received the tags "Kamina" (thematic content) and "1_BCU" (compositional form), Figure 1.

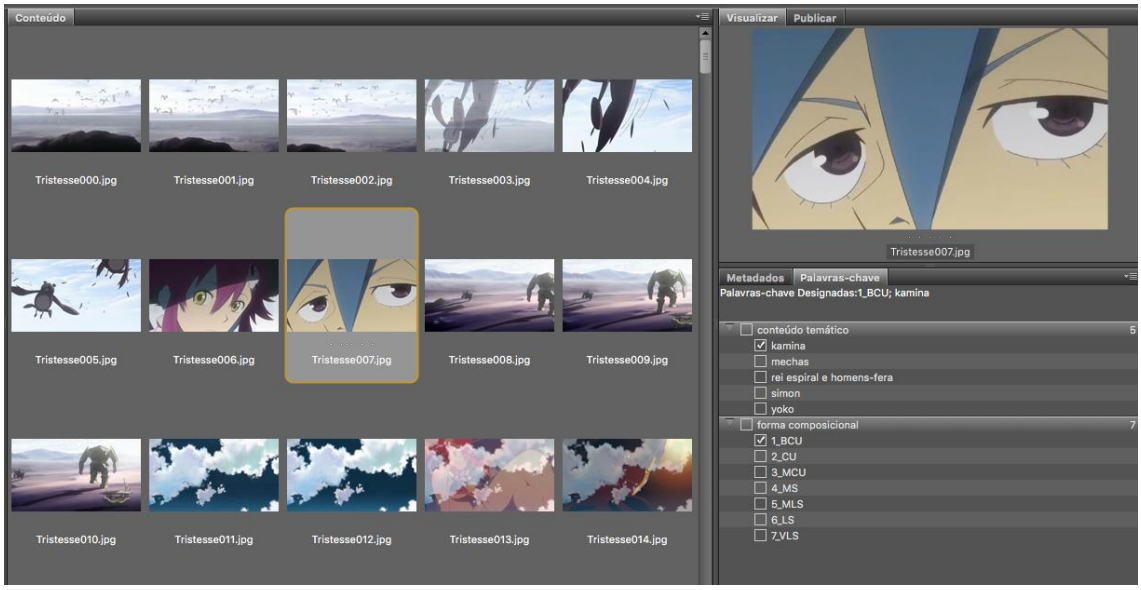


Figure 1. Metadata - La tristesse durera toujours

Therefore, according to the primary research goal, it was possible to filter the *corpus* by its metadata and so to batch the frames into at least four different sets (character, plan scale, AMV and frame number) for digital processing, visualizations, and analysis of audiovisual data.

2. 2 – Tagging audio feature

In the same way, due to the *corpus*'s characteristics, it was necessary to add to the methodology proposed by Manovich (2013) some procedures to tagging the features of the sounds. To do so, we followed the musical structure analysis model as it is developed by William Moylan (2002) and adapted by Ethan Hein (2012; 2013).

[5] Available in: <http://goo.gl/YthDg5>, (accessed: 03 March 2019).

First, one completed the musical structure chart (Figure 2).

Seção	Intro	Verso1(a)	Verso1(b)	Refrão 1	Ponte 1	Verso 2 (a)	Verso 2 (b)	Refrão 2	Ponte 2	Parada	Refrão 3	*Conclusão*
Tempo de início de seção	0:00	00:22	00:43	01:04	01:25	01:35	01:46	02:17	02:39	02:48	02:59	03:21
Medida por seção	8	8	8	8	4	4	12	8	4	4	8	2
Métrica	4											
Tempo (batida por min)	91											
Total de batidas	331											
Voz (Eric Turner)												
Voz Rap (Tinie Tempah)												
Voz (*backing* Tinie)												
Voz (*backing* Eric)												
Sintetizador												
Piano												
Guitarra												
Bateria (eletrônica)												
Efeitos (*turntable*)												
Importante observar como é marcado o ritmo; não só pelas batida eletrônica												
See a model for your analysis		Sledghammer Analysis			Air Traffic Analysis							
Notes/Description:	Importante observar como é marcado o ritmo; não só pelas batida eletrônica. Verso 2 (a e b) têm um ritmo mais marcado / pelo piano que bate "grave" na entrada do tempo/ somados dá dois tempos do refrão (16). Ainda tem uma quebra no Verso 2 a com o "turne table".											

Figure 2. Musical structure chart - Written in The Stars

Then, based on the musical structure chart, one listened carefully to each song on Sonic Visualiser software, and, as significant variations on the composition were identified, the audio tracks were fragmented and tagged into sections (*e.g.*, introduction, chorus, verse, etc.) and into different timbres representing song's instruments and voices – Figure 3.

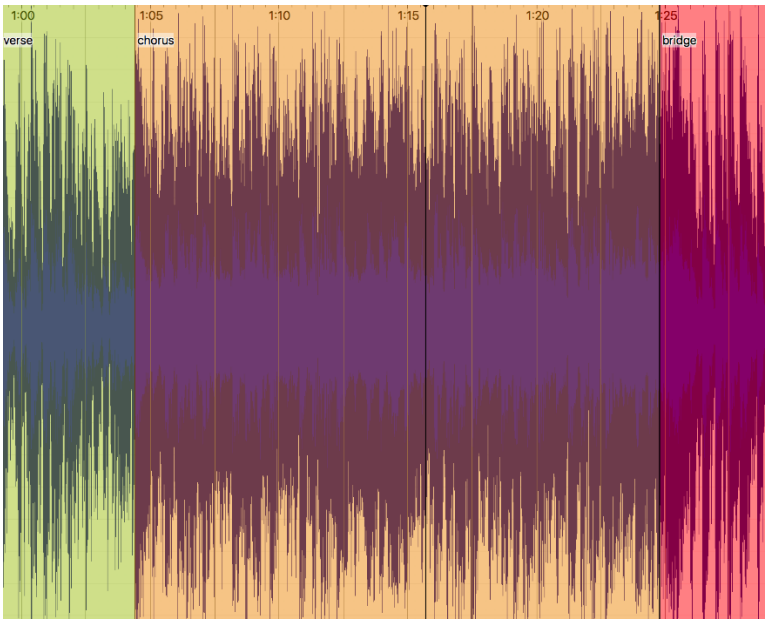


Figure 3. Audio track - Written in The Stars

Following these procedures, it was possible to generate (with greater precision) a musical structure and timbre metadata for each AMV song and export it as .csv format in order to match and compiled with the visuals features tagged during the previous stage.

Finally, after one has carefully exanimated and tagged the *corpus*, all frames/images were submitted to the digitally processed moment, where visual and audio data could be automatically gather using software like ImagePlot, DaVinci Resolve, and Sonic Visualiser, as follows.

2. 3 – Digital processing (ImagePlot)

With the help of ImagePlot software, the set of images that form our research *corpus* was processed digitally using visual parameters such as luminosity, saturation, hue, and shape. ImagePlot features two plugins written by members of the Software Studies Initiative: The ImageMeasure plugin was designed to measure values that enabled us to evaluate the color of an image (hue, brightness, and saturation); and the ImageShapes plugin was designed to measure the number of shapes in an image.

First, all frames were processed by the ImageMeasure plugin, which has automatically generated a tab-delimited text file (.txt) containing the results for the following measurements:

- Brightness median
- Brightness standard deviation
- Saturation median
- Hue median
- Hue standard deviation

After processing and measuring the color parameters, the *corpus* was submitted to the ImageShapes plugin to evaluate the number of shapes presenting in each image automatically. According to Manovich (2012), the ImageShapes plugin first converts each image into a binary (black and white) image. Then, it counts the number of distinct white areas in the image, and prints the results in a window called Summary, which must be select and paste into a new tab-delimited text file (.txt)

Summary

Slice	Count	Total Area	Average Size	Area Fraction	Median
tristesse244.jpg	18	109763.00	6097.94	47.9	255
tristesse245.jpg	24	90992.00	3791.33	39.7	255
tristesse246.jpg	5	38435.00	7687.00	16.8	255
tristesse247.jpg	6	38824.00	6470.67	17.0	255
tristesse248.jpg	1	100729.00	100729.00	44.0	255
tristesse249.jpg	1	84547.00	84547.00	36.9	255
tristesse250.jpg	2	89048.00	44524.00	38.9	255
tristesse251.jpg	2	116199.00	58099.50	50.8	255
tristesse252.jpg	7	85143.00	12163.29	37.2	255
tristesse253.jpg	16	65429.00	4089.31	28.6	255
tristesse254.jpg	32	90711.00	2834.72	39.6	255
tristesse255.jpg	20	96807.00	4840.35	42.3	255
tristesse256.jpg	28	95777.00	3420.61	41.8	255
tristesse257.jpg	34	97766.00	2875.47	42.7	255
tristesse258.jpg	17	109705.00	6453.24	47.9	255

Figure 4. ImageShapes Summary

According to Manovich (2012), the results produced by the ImageShapes plugin are approximate and depend on the kind of image measured. Although they do not always accurately reflect the actual number of shapes in an image, the data can be useful for comparing the result between a set of images. For instance, we can identify when there is a break (or change) in the frame sequence. That is, it is possible to use the data generated by ImageShapes to describe and evaluate the process of constructing visual rhythms in a particular video.

At the end of this step, we compiled the previously generated color data and other visual parameters processed by the ImageMeasure and ImageShapes plugins into a single spreadsheet.

	A	B	C	D	E	F	G	H	I	J	K	L	M
1	filename	imageID	minutos	personagens	planos	escala.de.planos	brightness_median	brightness_stdev	saturation_median	saturation_stdev	hue_median	hue_stdev	shape_count
2	tristesse000.jpg	1	0	NA	7_VLS	7	190	827.295	20	134.191	157	316.082	1
3	tristesse001.jpg	2	0,01	NA	7_VLS	7	209	695.007	20	124.073	159	227.847	1
4	tristesse002.jpg	3	0,02	NA	7_VLS	7	231	550.624	20	104.623	158	178.252	16
5	tristesse003.jpg	4	0,03	NA	2_CU	2	209	407.960	23	75.565	153	84.319	21
6	tristesse004.jpg	5	0,04	NA	1_BCU	1	250	725.994	27	160.100	148	132.877	18
7	tristesse005.jpg	6	0,05	NA	3_MCU	3	250	544.943	24	133.103	148	136.978	15
8	tristesse006.jpg	7	0,06	yoko	1_BCU	1	82	746.907	78	372.150	196	773.831	8
9	tristesse007.jpg	8	0,07	kamina	1_BCU	1	178	421.757	64	303.936	31	665.629	21
10	tristesse008.jpg	9	0,08	mechas	7_VLS	7	170	724.446	26	472.514	180	424.192	3
11	tristesse009.jpg	10	0,09	mechas	7_VLS	7	177	702.033	24	401.211	180	554.434	9
12	tristesse010.jpg	11	0,1	mechas	7_VLS	7	183	700.065	23	358.171	180	610.619	8
13	tristesse011.jpg	12	0,11	NA	7_VLS	7	201	697.136	65	743.592	146	135.856	18
14	tristesse012.jpg	13	0,12	NA	7_VLS	7	202	724.795	74	803.962	144	156.998	15
15	tristesse013.jpg	14	0,13	yoko	5_MLS	5	179	357.974	48	311.823	173	1.039.945	16
16	tristesse014.jpg	15	0,14	kamina	2_CU	2	133	506.716	57	468.304	153	763.567	12
17	tristesse015.jpg	16	0,15	NA	7_VLS	7	182	713.742	79	795.191	145	157.541	17
18	tristesse016.jpg	17	0,16	NA	7_VLS	7	242	112.031	8	37.724	146	207.865	3
19	tristesse017.jpg	18	0,17	NA	7_VLS	7	84	518.967	52	424.664	144	406.821	7

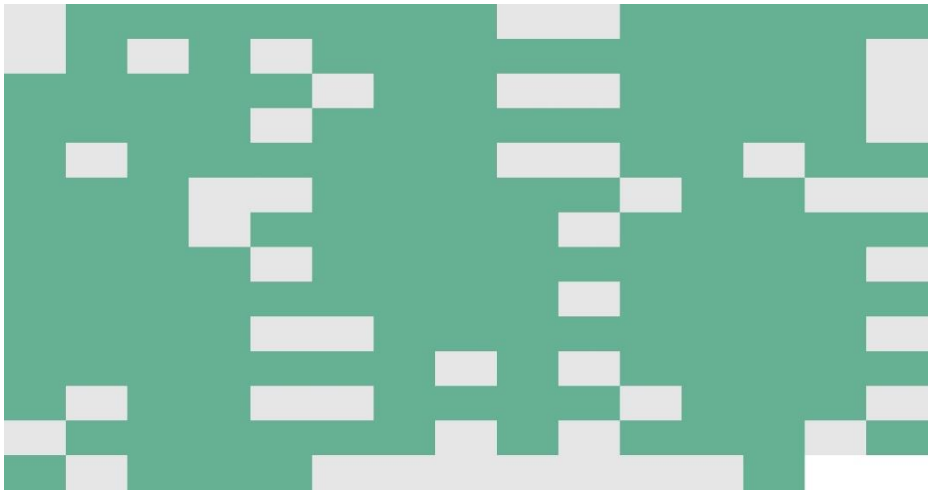
Figure 5. Spreadsheet, La tristesse durera toujours

2. 4 – Digital processing (DaVinci Resolve)

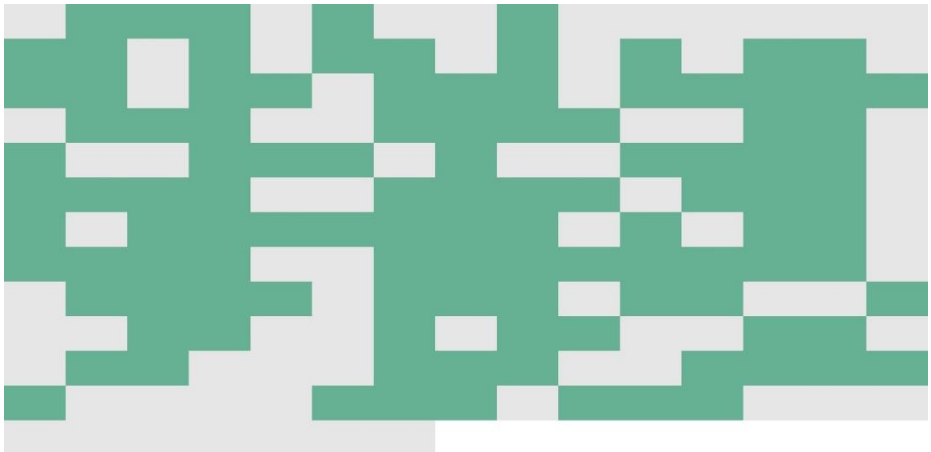
The possibility to evaluate the synchronization established between visual and musical rhythms is essential to our research: the pace of a cut (together with shot composition) in a remix scene is a fundamental data to be included in the AMVs analyze. Therefore, the *corpus* was submitted to DaVinci Resolve to detect cuts in all AMVs automatically.

DaVinci Resolve gives the possibility to export the result as a .csv, adding it to other information obtained in the previously digital processing stage to focus on the visual rhythm -Figure 6.

Spiral – Action



Flash! – Humor



Tristesse – Drama

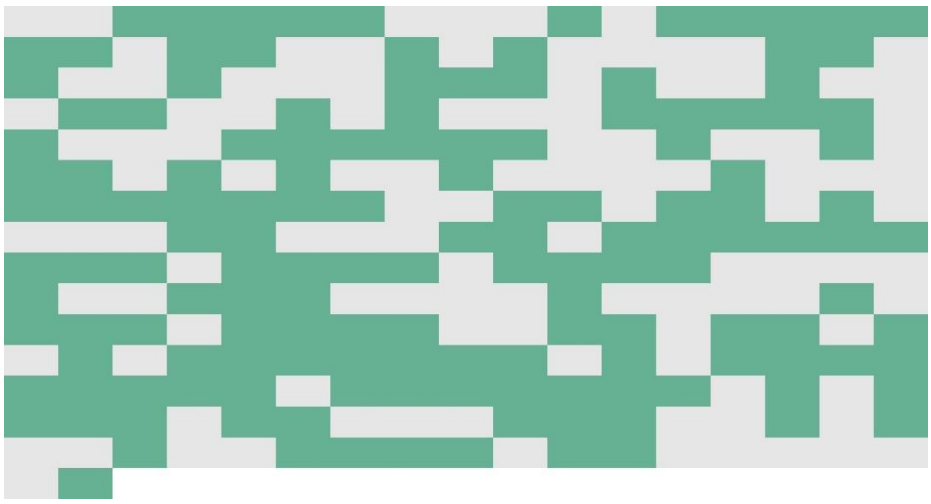


Figure 6. Visual rhythm - AMV's genre: Action, humor, Drama. Color code: green = scene cuts.

For instance, this procedure gives us the opportunities to focus on rhythm analyzes, on which one can distinguish moments when a scene pace increases (green area - faster visual rhythm), from those, when a scene is "longer" (a grey area - low visual rhythm).

Moreover, using Adobe Bridge and Photoshop, it was possible to incorporate all the data gathered so far into the images/frame metadata, and so, automatize the image batching process developed by Navas before in his Analysis of 30 YouTube Music Video Mashups to describe and analyze our corpus.

2. 5 – Digital processing (Sonic Visualiser)

The synchronization between visual and musical rhythm is an essential aspect in the creation of a good AMV: through proper sync between music, lyrics, and mood of original material, editors materialize the different categories of AMVs (drama, humor, and action).

In order to push our methodology even further towards our primary goal, the next important step taken was comparing visual and sound rhythm. Thus, the free software Sonic Visualiser was handy: it offers different tools and plugins not only for annotation and visualization but also to processed digitally the audio data, Figure 7.

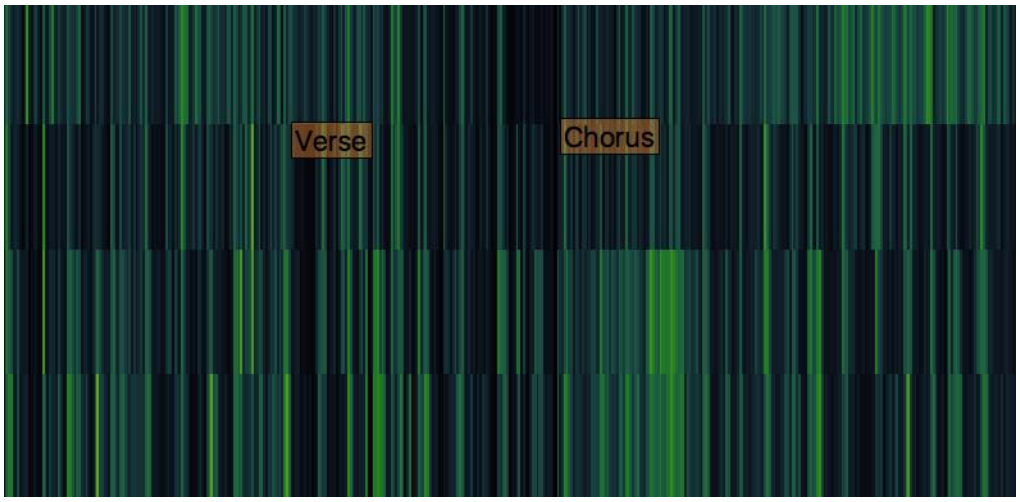


Figure 7. Chromagram/Spectrogram plus music (form) annotation - Spiral AMV

Most importantly, Sonic Visualiser also offers the possibility to export the audio data as a .csv files, which can be processed, compared, and explored alongside other visual data in "R."

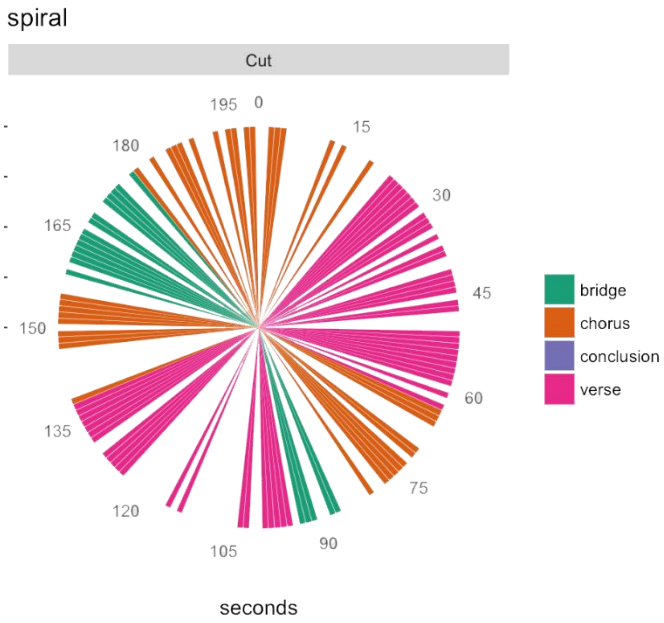


Figure 8. Video cut and song section compared (R) - Spiral AMV.

2.6 – Exploratory data analysis

After the previous step, we developed some graphs and visualizations for the initial exploration of the research *corpus*. In that sense, we adopted the visualization techniques developed by Navas, which have allowed us to create montages that enabled us to reveal patterns existing in the AMV's audiovisual.

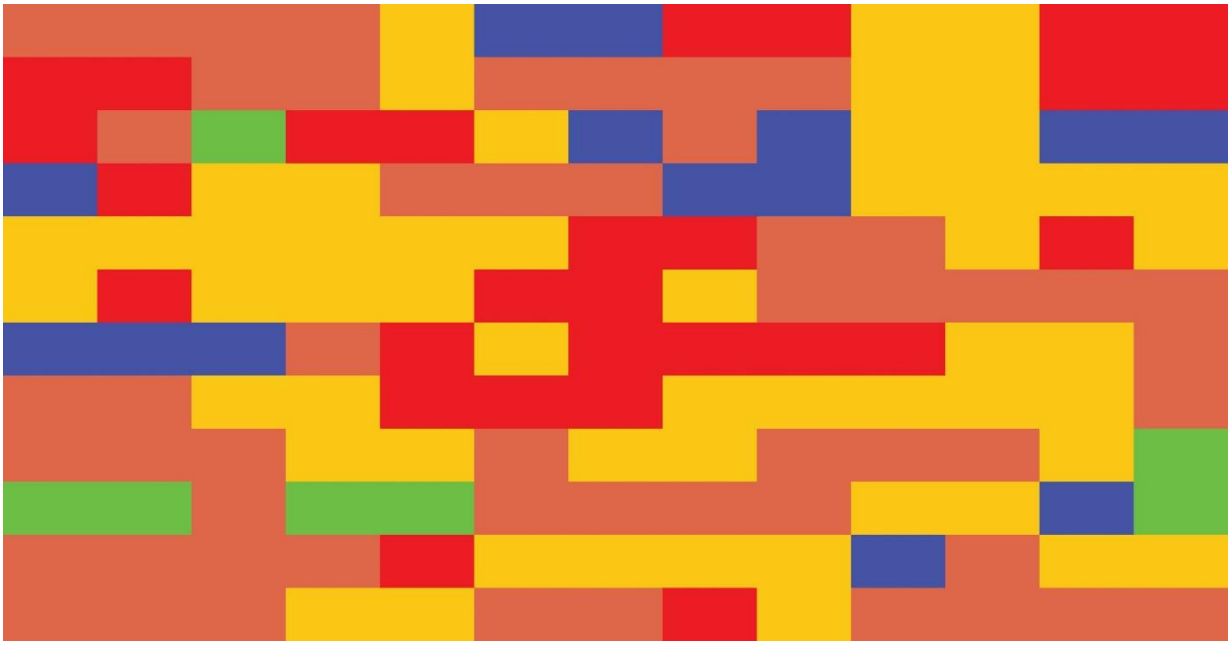


Figure 9. Visualization of anime characters in the AMV Spiral – Action. Color code: red = Kamina, yellow = Simon, blue = Yoko, green = Spiral King, brown = Mechas.

Therefore, as Navas and Manovich suggest it (MANOVICH, 2010; 2011; NAVAS, 2012; 2013; 2015), we rely on the media visualization features offered by the ImagePlot software, which distinguishes three direct

visualization techniques: montage visualization, synthesized image and slice visualization (ZEPEL, 2011).

The montage visualization technique involves arranging the frames of a video in a rectangular grid according to its original sequence – Figure 10.

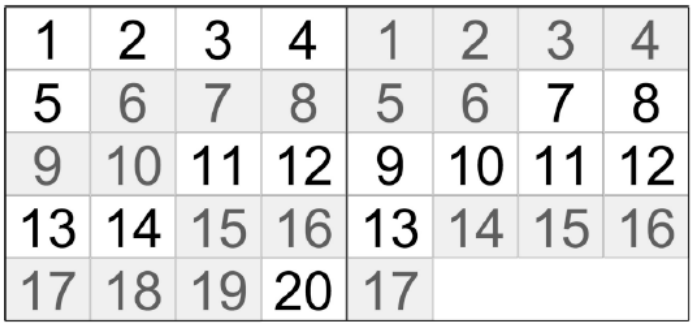
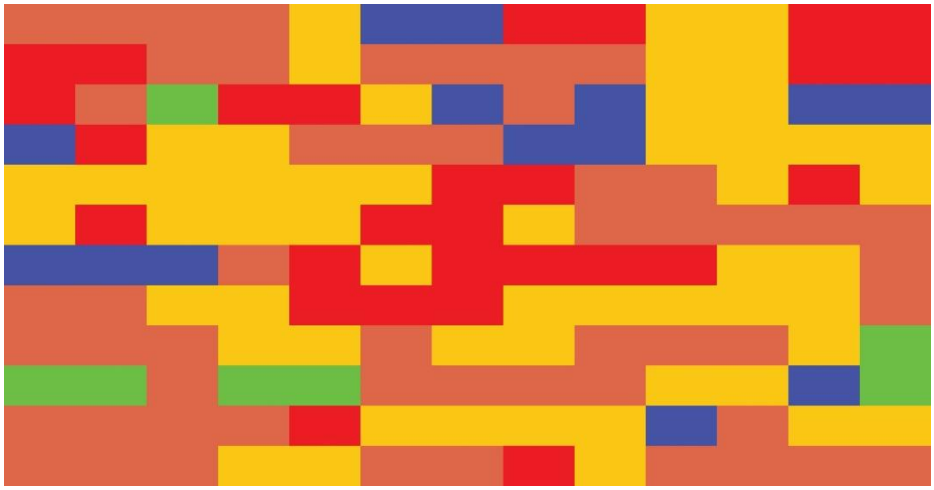


Figure 10. Assembly visualization (ZEPEL, 2011, page 7).

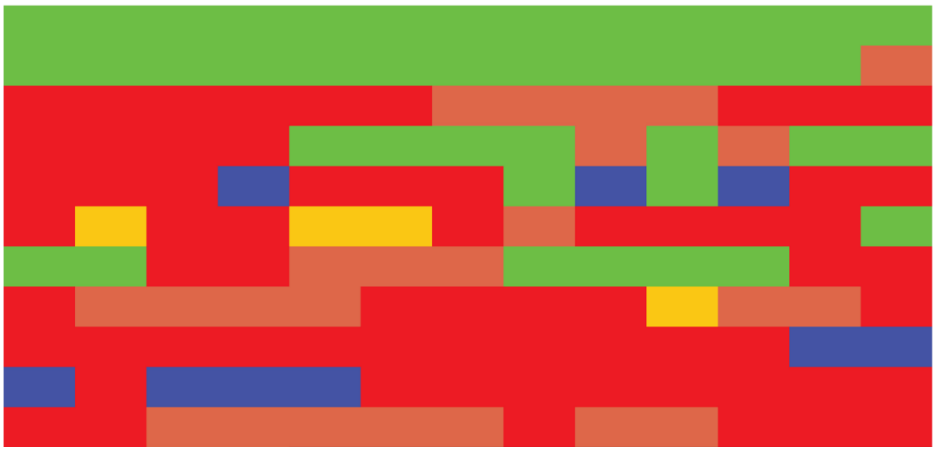
One this diagram (Figure 10), each square represents a video's frame: the left video has 20 frames, and the right, 17. It allows the researcher to visualize the formal and content patterns of an entire video in a "direct" and "instantaneous" way. This technique is particularly recommended for comparing different videos at the same time.

For instance, in our case, we could compare how the AMVs editors selected the materials to remix based on the anime's original character - Figure 11

Spiral – Action



Flash! – Humor



***Tristesse* – Drama**

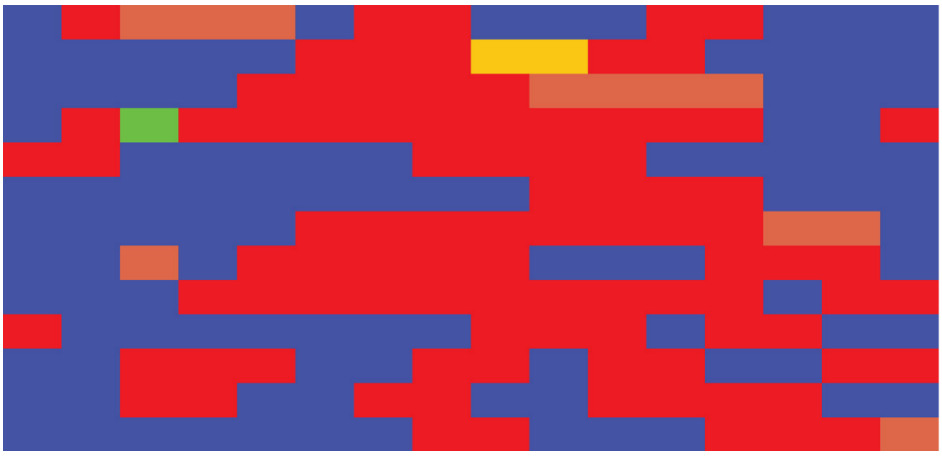


Figure 11. Visualization of anime characters in AMV's genre: Action, humor, Drama. Color code: red = Kamina, yellow = Simon, blue = Yoko, green = Spiral King, brown = Mechas.

In the Action AMV (Spiral), different from the Humor and Drama AMVs (Flash! and Tristesse), the editor distributes his clips' selection between giant robots controlled by people - Mechas (color code: brown) - and the others anime's characters. In that particular case, we can see that the editor centers his effort to construct a whole that emphasis the struggle and relationship between Simon (color code: yellow) and his friend Kamina (color code: red) - Figure 12.

Another "direct visualization" technique commonly used is *the synthesized image composition*. This technique (Figure 13), overlap frames of audiovisual material to create a synthesized image.

Figure 12. Synthesized image (ZEPEL, 2011, page 7).

According to Zepel (2011, page 7), if, after the synthesized frames, the elements of the image remain discernible, it indicates that the objects in scenes remained in the same position for a significant portion of the video. However, if the synthesis appears blurred and uniform, we have a likely indication that the visual elements of the video were moved continuously or altered.

For instance, when we put the frames of the AMV La tristesse durera toujours into a montage visualization batched by the characters Kamina and Yoko (Figures 13 and 14), it was possible to notice that Kamina scenes have a darker bluish tone than Yoko, who has a yellow and red feature.

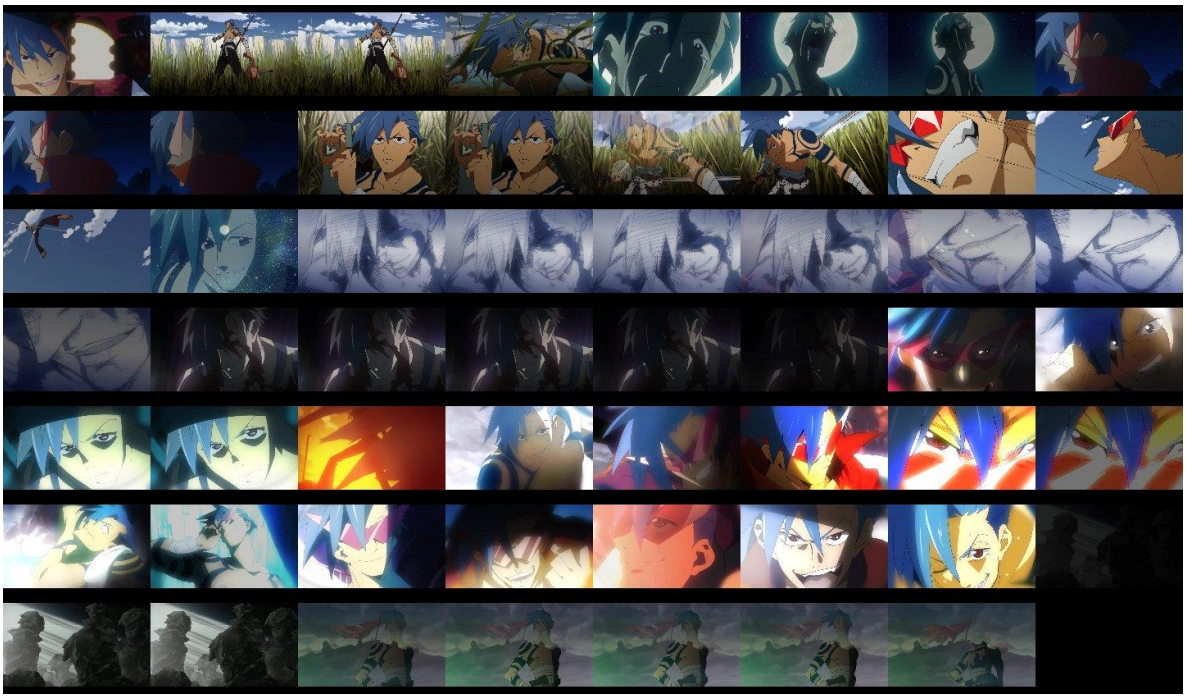


Figure 13 – Montage - Kamina in La tristesse durera toujours

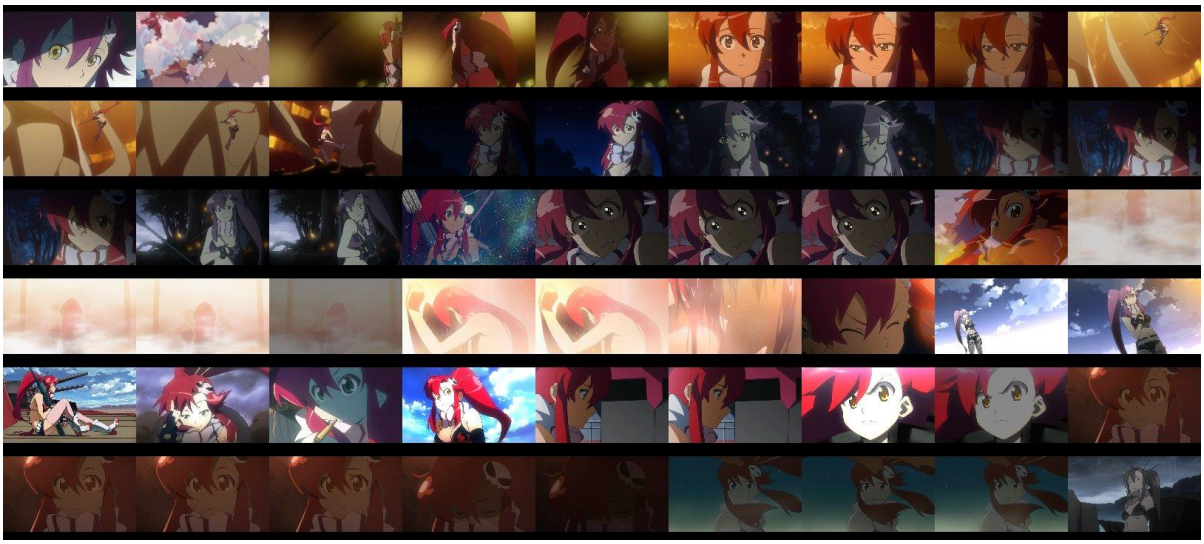


Figure 14. Montage - Yoko in La tristesse durera toujours

The tendency to compose scenes with a specific color tone to represent a particular character is seen by using a direct synthesized visualization technique – Figures 15 and 16.

Figure 15. Synthesized image - Kamina frames in La tristesse durera toujours

Figure 16. Synthesized image - Yoko frames in La tristesse durera toujours

In addition to exploring the *corpus's* data through a direct visualization technique, we mixed the functionality of some tools, such as Adobe Bridge, DaVinci Resolve, and "R" (free software for statistical computing) in order to explore the AMV's metadata in different ways, envisaging its multisemiotic feature. For instance, we can identify The AMV Spiral's visual pace (its relation between scene and cuts), and how it underlines the subject and character in the frame: it focuses in the action aspect of the anime by, mostly, selecting materials configured by Simon's and Mechas's scenes (Figure 17).

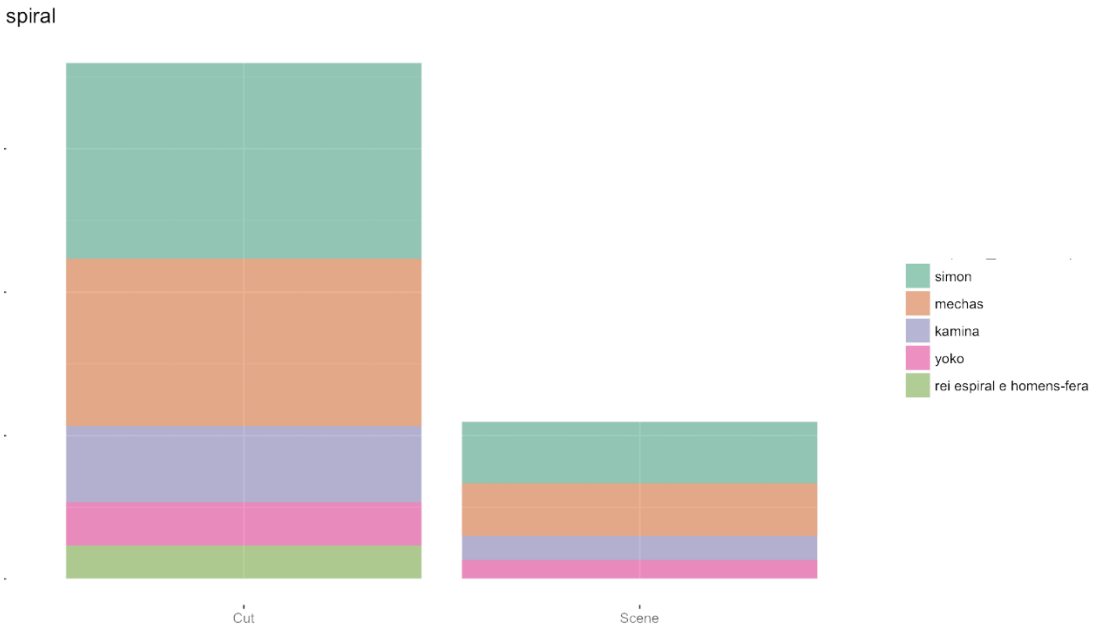


Figure 17. Characters in frame by cut and scene - Spiral AMV

Nevertheless, when the *AMV*'s *shots* and *characters* are put together to match with the *beat/rhythm* of the song[6] (Figure 18) and when the *scenes* chosen from the original anime to compose the visual pace were *sync* to the music, we can analyze how the emphasis on the *action* between Simon and *Mechas* where also combined with the character *Kamina* - specially during the first part of the video.

[6] Written in the Stars, by *Tinie Tempah* featuring Eric Turner

Figure 18. Video cut and song section compared with characters and shot type (R) - Spiral AMV

If we focus on the chorus of the song - *Oh written in the stars/ A million miles away/ A message to the mane/ Oh, Seasons come and go/ But I will never change/ And I'm on my way* –, we can recognize (Figure 19) that the first chorus is edited and synchronized with one Simon's close-up scene combined with medium shots from Kamina and Mechas.

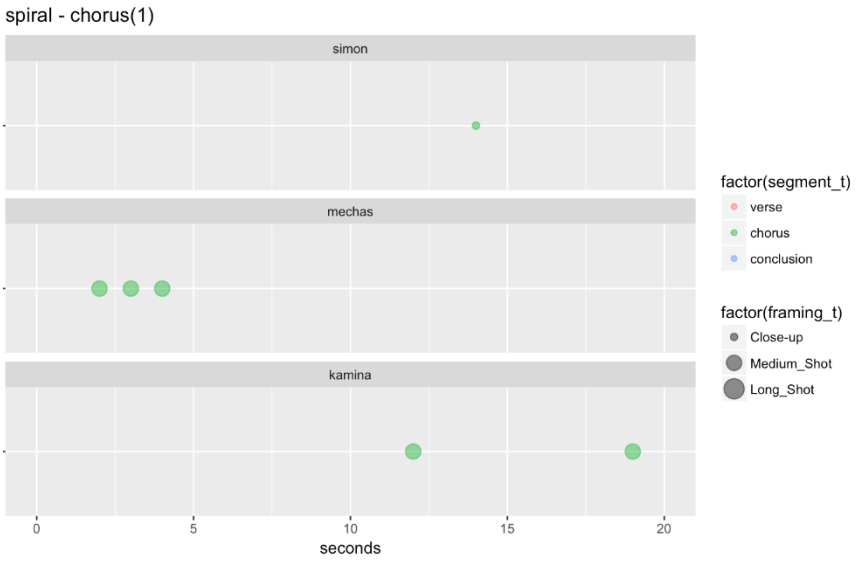


Figure 19. Video cut and song section compared with characters and shot type (R) - Spiral AMV – Zoon Chorus (1).

Then, during the second chorus, this relation changes: the remix was composed of three Kamina's close-up scenes combined with Simon's medium shots (Figure 20).

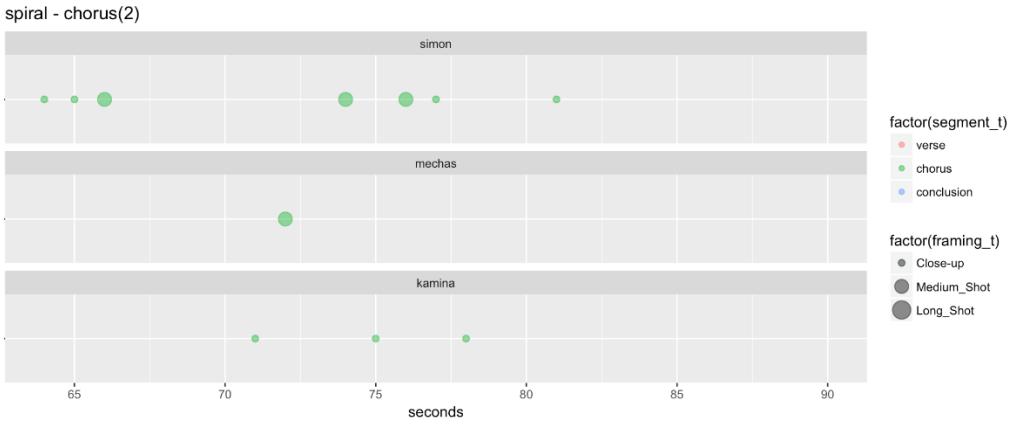


Figure 20. Video cut and song section compared with characters and shot type (R) - Spiral AMV – Zoon Chorus (2).

Finally, the last chorus is produced almost entirely with Simon's and Mecha's scenes. (Figure 21).

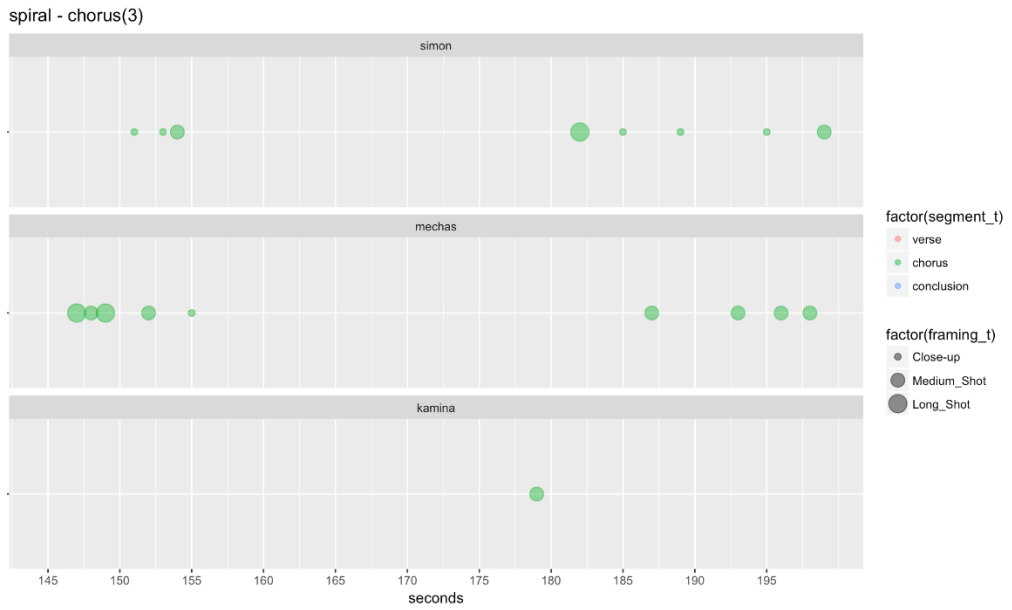


Figure 21. Video cut and song section compared with characters and shot type (R) - Spiral AMV – Zoon Chorus (3).

3. Final considerations

When comparing The AMV Spiral's with the original material, we can understand the editor's particular comment with the *sync* established between music and image: he emphasizes how Simon has grown during the saga. More precisely, how Simon has fulfilled his destiny (written in the stars), becoming vital to his group after the death of Kamina - his best friend - and also how Simon has struggled during this path, learning how to use his internal powers, *i.e.*, his "Spiral force."

We can see how rhythm *syncs* may function, folding in two directions: first, structuring, along with thematic content and style choices, the compositional form, and second, reinforcing an axiological statement (theme, as in Bakhtin/Volochinov).

So, rhythm can be understood in both ways, as *architectonic form* (from its axiological and social structure point of view) and as a *compositional form* (from its technical and mechanical aspects). As a *compositional form*, rhythm is achieved by ordering materials, both acoustically and visually. Nevertheless, rhythm is also architectonic apprehended (heard and recognized) when it is (stylistically) related to the values of an inner striving tension, which it consummates. In our context, rhythm can be directly associated to the conception and perception of different AMVs categories – action, drama, and humor - but also linked with the AMV's *theme*, or with a particular editor point of view and his lecture/opinion from the original material selected to form his work.

During the time at Penn State/ADRI, we have explored carefully the data set envisaging needs and problems intending to design a better quantitative methodology procedure to explore a multisemiotic *corpus*. With the methodology set the way seen in this article, we think that it would be possible to add more videos in which AMV's category (action, drama, humor), leading this research to a new stage, in which we can submit the first assertions through revisions, and so, developing an unsupervised machine learning model that enables to tag automatically a more considerable *corpus*.

4. References

BAKHTIN, M. **Speech Genres**: Other Late Essays. Austin, TX: University of Texas Press, 1986, pp. 60-63.

BERRY, D. M (Ed). **Undertanding Digital Humanities**. New York: Palgrave Macmillan, 2012.

HEIN, E. **Sonic analysis of "Tightrope" by Janelle Monáe**, s/p, 2012, <http://goo.gl/Jj3FDo>.

_____. **Analysing the musical structure of 'Sledgehammer' by Peter Gabriel**, s/p, 2013, <http://goo.gl/6TwEu5>.

HUNSTON, S. **Corpora in Applied Linguistics**. New York: Cambridge University Press, 2012.

KABAKOFF, R. I. **R in action**: Data analysis and graphics with R. New York: Manning Publications, 2015.

MANOVICH, L. **Media visualization**: Visual techniques for exploring large media collections. Methods and techniques for media visualization; analysis of our lab's digital humanities projects that use media visualization, 2011. s/p, <http://migre.me/fu8QM>.

_____. **What is visualization?** Media visualization vs. information visualization; important examples of media visualizations done by artists, 2010. s/p, <http://goo.gl/sVLJqa>.

_____. **ImagePlot documentation**, 2012, <https://goo.gl/F2J42P>.

_____. **Visualizing Vertov**, 2013, <http://goo.gl/PXbPwW>.

NAVAS, E. **Remix Theory**: The Aesthetics of Sampling. New York: Springer – Verlag/Wien, 2012.

_____. Modular complexity and remix: the collapse of time and space into search. **Anthrovision**, 2013, < http://anthrovision.revues.org/324 >.

_____ **Analysis of 30 YouTube music video mashups**, 2015, < https://goo.gl/fMvf23 >.

NAVAS, E.; GALLAGHER, O.; BURROUGH, X (Eds.). **The Routledge Companion to Remix Studies**. New York: Routledge. 2015.

SARDINHA, T. **Lingüística de Corpus**. São Paulo: Editora Manole, 2004.

SMIT, J. W.; KOBASHI, N. Y. **Como elaborar vocabulário controlado para aplicação de arquivo**. São Paulo: Arquivo do Estado/Imprensa Oficial do Estado de São Paulo, 2003.