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BACHELOR FINAL PAPER

THE USAGE OF PIANO IN PIXAR'S FILMS

**INSIGHT OF THE PIANO INSTRUMENT IN
*MONSTERS INC., UP AND INSIDE OUT***

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ABSTRACT

This Bachelor Final Paper shows an analysis of the piano usage as a solo or main instrument inside the soundtrack of the Pixar animation studios films. In order to conduct the research, a detailed analysis of the use of the piano in *Monsters Inc.*, *Up* and *Inside Out* and a comparison with the rest of the animation studios' movies released until 2021 has been made. Furthermore, a survey has been conducted aiming to know the spectators' preferences for the leading instrument in an *Up* scene.

The aim of this Paper has been to find if the piano use in Pixar film music follows a pattern or not. The investigation's conclusions confirm that the piano usage as a main instrument is placed in moments where the action is related with family or friends, being both joyful or sad moments. Moreover, the use of the piano of the whole filmography until 2021 is classified in four groups: relationship, remembering the old days, main instrument, piano as part of the orchestra.

Keywords: Disney Pixar, piano, soundtrack, film, animation

RESUM

Aquest Treball de Fi de Grau mostra un anàlisi de l'ús del piano com a instrument solista o principal en la banda sonora de les pel·lícules de l'estudi d'animació de Pixar. Per dur a terme la investigació, s'ha analitzat en detall l'ús del piano de les pel·lícules *Monsters Inc.*, *Up* i *Inside Out* i s'han comparat les dades obtingudes amb la resta de pel·lícules del mateix estudi d'animació estrenades fins el 2021. A més a més, s'ha realitzat una enquesta per a conèixer les preferències dels espectadors sobre l'instrument principal en una escena d'*Up*.

L'objectiu del treball ha sigut trobar si l'ús del piano en la música de les pel·lícules de Pixar segueix un patró o no. Es conclou la investigació confirmant que la utilització del piano com a instrument principal té lloc en moments on l'acció està relacionada amb la família o amistats, i aquesta pot ser tant en moments alegres com en moments tristos. També es classifica en quatre blocs l'ús del piano segons com s'ha utilitzat en tota la filmografia fins el 2021: relacions, recordant el passat, instrument principal, instrument més de l'orquestra.

Paraules clau: Disney Pixar, piano, banda sonora, pel·lícula, animació

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I. INTRODUCTION

This research shows the piano usage of all the Pixar Animation Studios films released until 2021¹. It specifically emphasises the use of the piano instrument in *Monsters Inc.*, *Up* and *Inside Out*. In order to find if there is a specific pattern that composers tend to use with the mentioned instrument, an analysis of the plot and the piano interventions in the soundtrack have been done.

The basis of the project is exposed in this first chapter of the research: the main objective and the hypothesis, previous investigations and methodology. The second chapter shows all the obtained data that has been extracted from the films: the plot and piano analysis as well as timings and proportions of piano music in each movie. The global analysis and the comparison of the films take place on the third chapter. The fourth chapter shows the information extracted from the survey. Last but not least, the fifth chapter demonstrates the hypothesis and the conclusions close the research on the sixth chapter.

I. 1. Objective and hypothesis

This project aims to analyse the piano usage in *Monsters Inc.*, *Up* and *Inside Out* alongside a comparison with the piano interventions of the whole filmography of Pixar until 2021. The piano is used in a different way in each of the three selected films, that is why they were chosen to be analysed: to show the variety of different uses. And this is the main intention of this research, to find and catalogue this usage.

This principal objective goes together with the hypothesis, which is based on finding when is the piano placed during the film and see if there is a pattern that composers tend to use. Having seen the majority of the Pixar films before, I believed that it is used in the same parts of the plot: when all the hope is lost, the main character realizes something important or at the end of the film. This investigation aims to prove if the piano is used in this plot points (or not) or more in the animated Pixar films.

¹ See Filmography

I. 2. Previous investigations

Searching for bibliography at the beginning of the project was hard. There is few written scholar investigations of the point of view this paper aims to show. However, with the research being made, there were three articles to which special attention was taken and each of them was used to provide wider scope of knowledge in order to develop this paper.

The first one is *Giacchino as Storyteller: Structure and Thematic Distribution in Pixar's Inside Out*². Dr Andrew Simmons' paper demonstrates the similarities that musical and narrative structure share in Pixar's *Inside Out* alongside showing 'how large-scale analysis can be a beneficial tool for film music scholars'³. The article also provides graphs designed by the author himself, which are called Thematic Distribution Models⁴. These graphs 'display a proportional overview from the start of the diegesis on the left (excluding company logos, though these are often accompanied by music from the film) to the end on the right (excluding end credits)⁵ and show binary information: whether the selected data 'is shown as either *on* or *off*'⁶.

The paper concludes that *Inside Out* is 'clear and concise in its design'⁷ but 'films and scores of other genres and styles [...] may not present themselves in such an obviously narrative way'⁸. Dr Simmons also claims that analysing a film score as a whole and not individually theme by theme is more useful to get a better idea of it, arguing that 'the effectiveness (or functional value) of said music-applied-to-a-filmsegment is best appraised not in isolation, but within its larger musical and filmic context'⁹.

² Simmons, Andrew. "5. Giacchino as Storyteller: Structure and Thematic Distribution in Pixar's Inside Out (2015)." *Music on Screen: From Cinema Screens to Touchscreens. Part I*, edited by Sarah Hall and James B. Williams, MusicologyResearch, 2017 pp. 89–116.

³ *Ibid.*, p. 90.

⁴ See Appendix 1: Thematic Distribution Model by Andrew Simmons

⁵ Simmons, Andrew. "5. Giacchino as Storyteller: Structure and Thematic Distribution in Pixar's Inside Out (2015)." *Music on Screen: From Cinema Screens to Touchscreens. Part I*, edited by Sarah Hall and James B. Williams, MusicologyResearch, 2017, p. 96.

⁶ *Ibid.*, p. 96.

⁷ *Ibid.*, p. 112.

⁸ *Ibid.*, p. 112.

⁹ *Ibid.*, p. 113.

The second consulted article is “*Adventure is out there!*”: *Pastiche and Postmodernism in the Music of Up*¹⁰ by Bradley Spiers. This paper explores the different musical traditions that are reflected in the music of *Up*. Contextualizing the two trends that are followed in the scoring practice since the sixties, the popular music score and the classical Hollywood score, Spiers suggests ‘a third option which accounts for stylistic traits found in both Hollywood scoring practices: the pastiche score’¹¹. He claims that ‘Giacchino’s pastiche scores logically contain elements from both the popular and classical schools of scoring’¹².

The author also shares his theory of the framing function, which uses to refer the leitmotif ‘orchestrated in any number of musical settings’¹³. ‘The framing function engages in a more egalitarian collaboration with a leitmotif to articulate narrative understanding. Through the use of the framing function, a leitmotif can be orchestrated in a diverse array of musical environments’¹⁴.

Through analysing the leitmotifs’ use and their compositional style, the paper concludes that with ‘the use of the framing function, Giacchino exercises a masterful control over the contents of his scores and draws from an almost unlimited supply of musics to provide a setting for specific meaningful motives’¹⁵. And it is also exposed that ‘Giacchino’s use of the pastiche score’s diverse array of allusions to a multitude of Western musical styles yields a film score in *Up* that is not simply evocative of a single musical tradition, but instead succinctly reflects the postmodern aesthetic’¹⁶.

The third main article is *The Emotional Characteristics of Piano Sounds with Different Pitch and Dynamics*¹⁷ by Chuck-Jee Chau, Ronald Mo and Andrew Horner. Taking into account the highly use of the piano in the diverse musical styles, for this article were conducted

¹⁰ Spiers, Bradley. ““Adventure Is out There!”: Pastiche and Postmodernism in the Music of UP.” *Nota Bene: Canadian Undergraduate Journal of Musicology*, vol. 5, num. 1, 6 Apr. 2013 pp. 111–130., <https://doi.org/10.5206/notabene.v5i1.6583>.

¹¹ *Ibid.*, p. 113.

¹² *Ibid.*, p. 113.

¹³ *Ibid.*, p. 114.

¹⁴ *Ibid.*, p. 114.

¹⁵ *Ibid.*, p. 125.

¹⁶ *Ibid.*, p. 126.

¹⁷ Chau, Chuck-Jee, et al. “The Emotional Characteristics of Piano Sounds with Different Pitch and Dynamics.” *Journal of the Audio Engineering Society*, vol. 64, num. 11, Nov. 2016 pp. 918–932., <https://doi.org/10.17743/jaes.2016.0049>.

‘listening tests to compare the effects of pitch and dynamics on the emotional characteristics of isolated one-second piano sounds’¹⁸.

Displaying the background of previous investigations related with the relation between the music emotion and timbre, the piano and the pitch and dynamics, the study shows the experiment and its results’ discussion. The article concludes that ‘ten emotional categories were significantly affected by pitch and nine of them by dynamics. In particular, the emotional characteristics Happy, Romantic, Comic, Calm, Mysterious, and Shy generally increased with pitch but sometimes decreased at the highest pitches. The characteristics Heroic, Angry, and Sad generally decreased with pitch. Scary was strong in the extreme low and high registers. In terms of dynamics, the results showed that the characteristics Heroic, Comic, Angry, and Scary were stronger for loud notes, while Romantic, Calm, Mysterious, Shy, and Sad were stronger for soft notes. Surprisingly, Happy was not affected by dynamics’¹⁹.

I. 3. Methodology

I. 3. 1. *Interview with Dr Andrew Simmons*

While searching for the right bibliography I had the chance of getting the contact of Dr Andrew Simmons. At first, the only intention was to ask him about his last research but he offered the option of talking and asking him my doubts if it was beneficial to my project. The research was still in an early stage and I decided to wait until I had it more developed. The 28th of January of 2022 I had the chance of interviewing him by video conference²⁰.

During approximately an hour we chatted mostly about Michael Giacchino’s scores. Firstly we talked about Dr Simmons career, then we moved on to the *Inside Out*’s themes and their meanings, afterwards we spoke about the piano usage in *Inside Out* and *Up*, the purposes of using the piano in film music and what instrument would he use in certain situations. Next, the conversation lead to the planification of writing a soundtrack, its tonal design and the

¹⁸ Chau, Chuck-Jee, et al. “The Emotional Characteristics of Piano Sounds with Different Pitch and Dynamics.” *Journal of the Audio Engineering Society*, vol. 64, num. 11, Nov. 2016, p. 918.

¹⁹ *Ibid.*, p. 918.

²⁰ Sarró Cases, Núria. “Interview with Andrew Simmons.” 28 Jan. 2022, 11 am., video call, 50’.

structure of films. Finally he shared his thoughts of his unpublished PhD Thesis²¹, showed me his methodology of making his diagrams and I asked him if I could use the same idea in order to make my own diagrams.

I. 3. 2. Plot analysis

For the purpose of having references of the events in each of the analysed films, a division of the plot is necessary. Taking into account two common three-act structure of story making and screenwriting – Christopher Vogler’s *The Writer’s the Journey* (Figure 1) and Syd Field’s *Paradigm* (Figure 2) – an alternative method combining both has been made (Table 1). In this way, the three films are under the same scheme, being some of the labels relevant for the relationship with the piano in the soundtrack. This alternative version shows the structural events that have been chosen from each structure and describes them. With the proposed Three-act Structure there isn’t a strict emphasis on the proportions of the acts, contrasting the remark that Field’s *Paradigm* states on the divisions of the acts.

The changes that present the Alternative Three-act Structure (Table 1) are simple: it is based in Syd Field’s *Paradigm* with five added steps. A first label is added to make a separation inside the Vogler’s *1. Ordinary World*, distinguishing the introduction of the world and situations themselves (*1. Introduction*) from the brief presentation of current days in the present time of the story (*2. Present Day*). In the third and fourth place are used the Field’s *Inciting Accident* (3.) and *Plot Point I* (4.) labels with its same meaning. The *5. Embark on a Journey* point starts the second act, on which the main character is generally forced to move or has difficulties to cope with. The following steps are from Field’s *Paradigm*: *6. Pinch I*, *7. Midpoint*, *8. Pinch II* and *9. Plot Point II*. The third act begins with Vogler’s *10. The Road Back* followed by the *Climax* (11.) and an added last step called *12. New Normality*, where the characters are living their previous lives but with the gained experience of the journey.

²¹ Simmons, Andrew, “Morphology of the Score: The Organisation of Music in the Films of Michael Giacchino and Pixar Animation Studios”, Oct. 2020, [Unpublished Thesis].

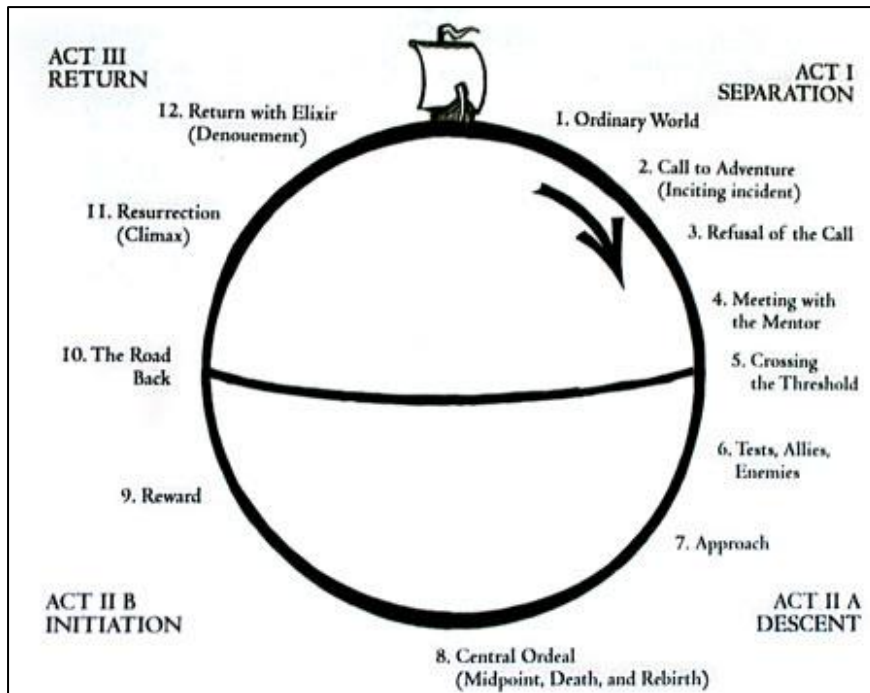


Figure 1: The Hero's Journey Structure

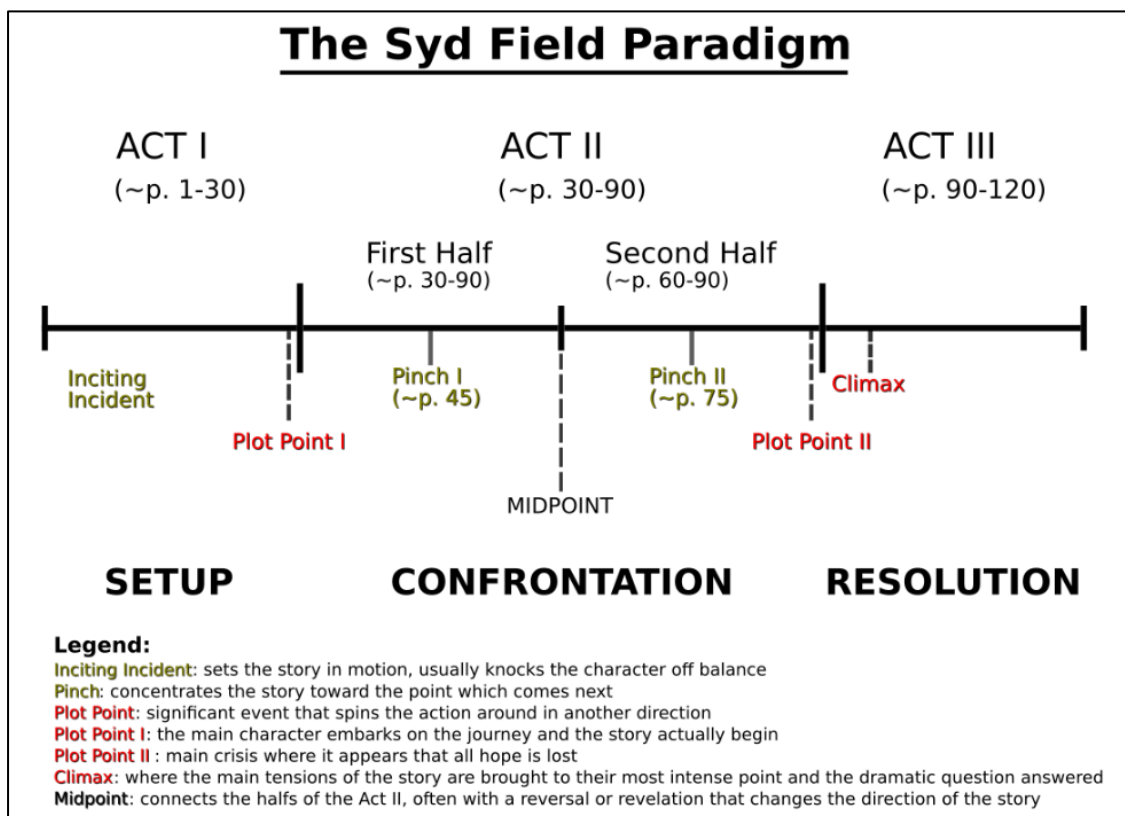


Figure 2: The Syd Field's Paradigm²³

²² Vogler, Christopher. *The Writer's Journey*. Michael Wiese Productions, 2007, p. 9.

²³ takethecannoli4. "R/Screenwriting - Did I Get Syd Field's Paradigm Right?" Reddit, 30 Jan. 2020, https://www.reddit.com/r/Screenwriting/comments/ew5oas/did_i_get_syd_fields_paradigm_right/.

ACT 1	1. Introduction	Generally takes place in the past. It shows all the background information that the viewer needs to understand what will come next.
	2. Present day	The regular live of the main character(s) is set up.
	3. Inciting Accident	'Sets the story in motion, usually knocks the character off balance' *
	4. Plot point 1	'Significant event that spins the action around in another direction' *
ACT 2	5. Embark on a Journey	The main character begins a journey physically or has to cope with adversity.
	6. Pinch I	'Concentrates the story toward the point which comes next' *
	7. Midpoint	The protagonist realizes the most important thing that learns throughout the film. This idea will guide them.
	8. Pinch II	'Concentrates the story toward the point which comes next' *
	9. Plot point II	'Main crisis when it appears that all hope is lost' *
ACT 3	10. The Road back	Returning home.
	11. Climax	'Where the main tensions of the story are brought to their most intense point and the dramatic question is answered' *
	12. New normality	Some time has passed. New live at home with the gained experience.

Table 1: Alternative Three-act Structure

* Descriptions taken from Syd Field's *Paradigm*²⁴.

²⁴ takethecannoli4. "R/Screenwriting - Did I Get Syd Field's Paradigm Right?" Reddit, 30 Jan. 2020, https://www.reddit.com/r/Screenwriting/comments/ew5oas/did_i_get_syd_fields_paradigm_right/.

I. 3. 3. Diagram development

As told in the chapter 1.2. *Previous investigations*, Andrew Simmons' graphs simply show the information that is *on* or *off* during the film. As a mean to make a clearer viewing of the data that has been collected for this Paper, a similar diagram like Dr Simmons' has been made. Figure 3 of *Monsters Inc.*'s piano timing can be used as an example.

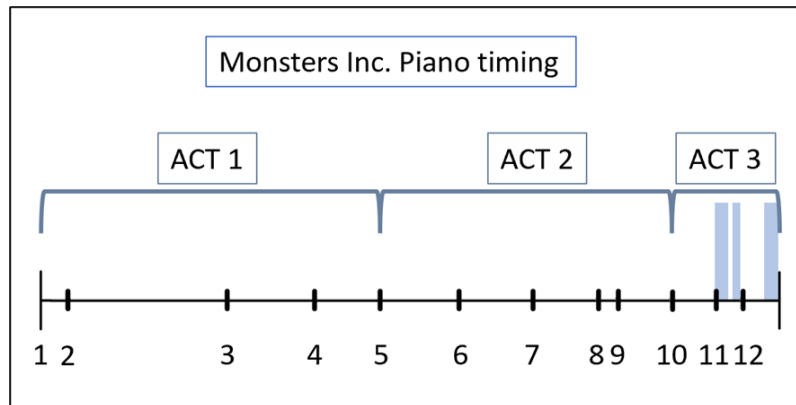


Figure 3: *Monsters Inc.*'s Piano timing

The information it shows is whether the piano is being heard or not and where inside the film. The entirety of the film from left to right – from the beginning of the story to the end – is represented by the horizontal line. The numbers and short vertical lines displayed inside are a reference of the events that happen, which are the twelve plot points exposed on the Alternative Three-act Structure. The light blue rectangles fitted between the horizontal line and the labels of the act's divisions are the representation of the space-time in which the piano is being heard.

For timing the films, it starts counting since the first moment of music without taking into account the initial credits until the moment that the final credits begin. The timings of the piano placement in the film music and the parts of the Alternative Three-act Structure can be consulted at the end of this Paper²⁵.

It has to be said that the diagrams are not a 100% accurate due to the limitations of equipment to make them. They have been made with the PowerPoint application. However, they are quite precise and allow the reader to get the idea that it is being presented.

²⁵ See Appendix 3: Film's timings

I. 3. 4. *Developing the survey*

The main idea of the survey was to know the feelings that viewers have depending on the instrument that is being used in the soundtrack in specific moments of the film. The scene from *Up Stuff I'm going to do*²⁶ was chosen because of its meaning inside the film and the use of piano throughout the moment. Four versions of the piano melodic line were recorded with other instruments (clarinet, cello, horn and flute). Each one was placed to fit within the video.

Comparing the original excerpt of the film with the four edited videos was the task of the respondents. The questions to be answered were to choose which feeling transmitted the original video and ranking from 1 to 5 which instrument was preferred. A box to send any observations they had was also added. The layout of the survey can be seen at the end of this Paper²⁷. The commentary of the preference of instrument in this excerpt takes place in the fourth chapter of this Paper. All the other responses adapted in graphs can be consulted at the end²⁸.

II. DATA COLLECTED

The following subchapters provide the data that has been extracted from each film. It is important to remark that the analysis only breaks down the use of the piano related with what happens in the plot. The study does not focus on the use of the main theme/leitmotif nor the number of times that it is being used, etc.. This Paper is only focused on when the piano is being clearly heard in the film music – which can be a solo piano moment, when the piano is accompanied by the orchestra or the instrument is playing alongside other instruments; in all cases the piano leads the music.

At the end of this Paper²⁹ there are all the timings extracted from *Monsters Inc.*, *Up* and *Inside Out* which have been used to develop the diagram of each film.

²⁶ The film excerpt can be watched with the following link: <https://youtu.be/PvgVsVmusPg>

²⁷ See Appendix 4: Survey layout

²⁸ See Appendix 5: Survey results

²⁹ See Appendix 3: Film's timings

II. 1. *Monsters Inc.*

Monsters Inc.'s soundtrack is not specially characterised by the piano instrument. The jazz and big band style is what makes this film music distinctive whereas the piano solo is only used three times during the whole film. These times take place at the end of the film, and all of them feature the same theme: *Boo's Theme*³⁰. That is the main reason why is this movie chosen to be analysed, its exclusive use is meaningful. Two of these three piano moments take place while Sullivan and Boo are saying goodbye to each other, and the third is when, just at the end, they can meet again.

Table 2 exposes *Monsters Inc.*'s plot structured with the proposed Alternative Three-act Structure. With the principal plot events organized, the diagram inspired by Simmons' Thematic Distribution Model (Figure 4) can be completed. The Figure 4 represents the totality of the film with the horizontal line, since the very first moment after the initial credits until the moment before the ending credits begin. The vertical little numbered lines displayed on the horizontal line are the representation of the events that occur in the film (the plot points of the Alternative Three-act Structure presented in the past subchapter I. 3. 2. Plot Analysis), which are described in Table 2. The timing of the events and measures to develop the diagram can be found at the end³¹.

³⁰ See the transcription of the theme in the Appendix 2: Themes transcriptions

³¹ See Appendix 3: Film's timings

ACT 1	1. Introduction	Simulation. How does the scream factory work.
	2. Present day	Mike Wazowsky's and James P. Sullivan's current lives.
	3. Inciting Accident	Sullivan finds Boo's door active.
	4. Plot point 1	Boo causes panic in the restaurant.
ACT 2	5. Embark on a Journey	Trying to find what to do with Boo. Sullivan thinks that she isn't a threat.
	6. Pinch I	Randall kidnaps Wazowsky and wants to try their invention with him. Sullivan participates in a scream simulation and scares Boo.
	7. Midpoint	Mike and James are banished. They realize the importance of their friendship.
	8. Pinch II	Sullivan rescues Boo.
	9. Plot point II	Escaping from Randall.
ACT 3	10. The Road back	Boo is no longer scared of Randall. They get rid of him. Waternoose is arrested.
	11. Climax	Saying goodbye to Boo.
	12. New normality	The factory now works with laugh power. Mike has repaired Boo's door, they can meet again.

Table 2: *Monsters Inc.*'s Alternative Three-act Structure

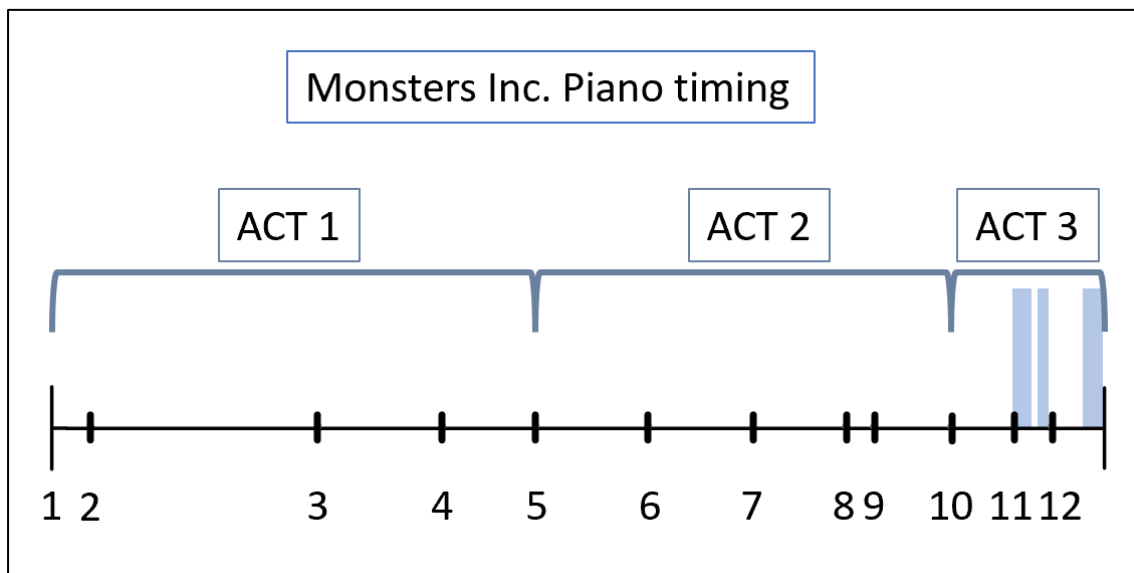


Figure 4: *Monsters Inc.*'s Piano timing

II. 1. 1. *Piano placement in the soundtrack*

As said at the beginning of this subchapter, the piano solo is only heard three times during the film. These three piano moments are played in the high register of the piano: the melody fits inside the fifth register. It has an andantino tempo and it is the key of E major.

The first one is placed at the film minute 1:18:21. Boo and Sullivan enter to her bedroom to say goodbye. The little girl is very happy to be there and shows her toys to him. After she is comfortably placed in bed, it is time for the final goodbye; Sullivan closes the door and Boo finds out that her closet is just a closet. While this happens, the piano can be listened a second time – 1:19:39 –. Last but not least, the third time takes place at 1:24:16. Mike shows to James Boo’s door reconstructed, and with the missing piece that Sullivan had saved, the little girl and the blue monster can meet again.

With just these three moments, there is only one minute and 49 seconds of piano solo in the whole soundtrack. That represents a 2,17% of the complete film.

II. 2. *Up*

The theme analysed in this film is the *Ellie Theme*³². It is considered the main theme because of the wide range of appearances during the film. Consequently, the piano version of it is relevant too taking place in the most important plot points. In this soundtrack there isn’t just a unique predominant music style, as Bradley Spiers states in his article³³. The theme is heard a handful of times in the whole film with different genres and instruments leading the melody, as a consequence it is also played with the piano plenty of times.

The following table (Table 3) provides *Up*’s plot events structured in the Alternative Three-act Structure, and the subsequent figure (Figure 5) shows the piano placement inside the film.

³² See the transcription of the theme in the Appendix 2: Themes transcriptions

³³ Spiers, Bradley. “‘Adventure Is out There!’: Pastiche and Postmodernism in the Music of UP.” *Nota Bene: Canadian Undergraduate Journal of Musicology*, vol. 5, num. 1, 6 Apr. 2013, pp. 111–130.

ACT 1	1. Introduction	Carl and Ellie's first encounter and life together.
	2. Present day	Carl hasn't accept that her wife had passed away. A real state agency wants to buy his house.
	3. Inciting Accident	Reluctant to cooperate with the real state agency workers', Carl hits one of them.
	4. Plot point 1	Carl finds by chance Ellie's adventure book and decides to make the wish they had as children come true.
ACT 2	5. Embark on a Journey	Carl takes off his house road to Paradise Falls. He is forced to continue together with Russell.
	6. Pinch I	Karl finds out that Russell's parents aren't there for him.
	7. Midpoint	After deciding to save the house instead of Kevin, Carl realizes how meaningful was his life with Ellie and that now is time to begin other adventures with Russell and Dug.
	8. Pinch II	Trying to rescue Kevin from Charles Muntz and his dogs.
	9. Plot point II	Escaping from Muntz
ACT 3	10. The Road back	The house disappears into the clouds. Carl, Russell and Dug meet Kevin's children. They go back home.
	11. Climax	Carl gives to Russell the Ellie badge at the ceremony.
	12. New normality	-

Table 3: *Up's* Alternative Three-act Structure

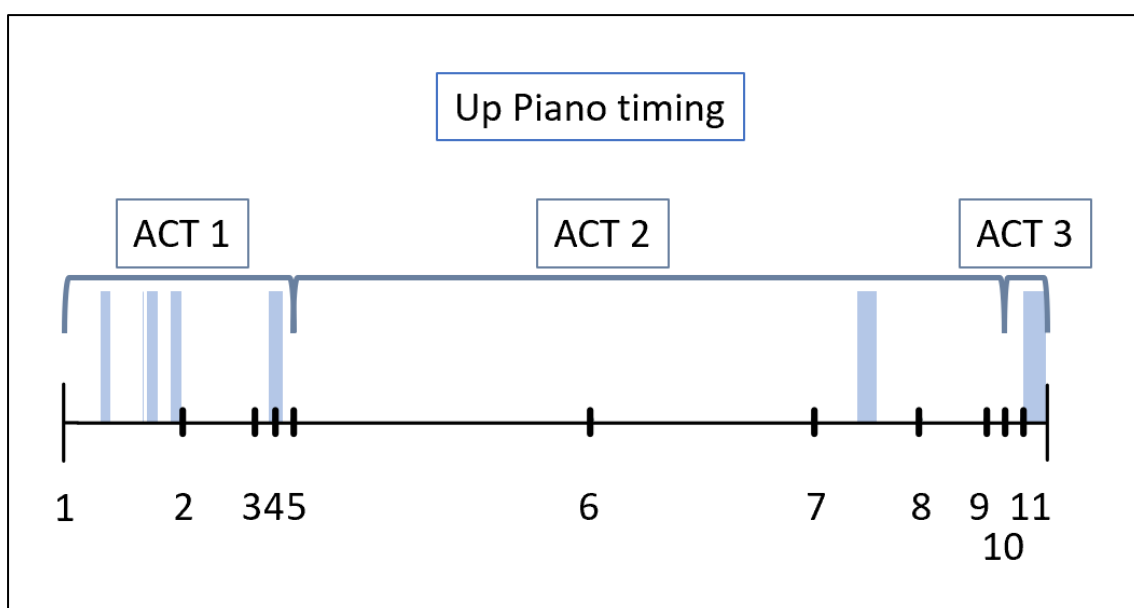


Figure 5: *Up's* Piano timing

II. 2. 1. *Piano placement in the soundtrack*

Up's film music contains six piano solo moments, the majority of them displayed in the first act, and one moment when it only plays the melody. The earliest use of piano takes place in the film minute 0:04:40, when Carl meets for the first time Ellie. Her theme is played comically due to the funny situation in which the boy is trapped to save his balloon.

The three following moments, are captured inside the *Married Life* scene. After having married and refurbished the old house where they used to play, they wonder on the possibility of having children. While they are giving it a thought, the piano does the melody accompanied by the orchestra – 0:08:14 –. They then find out that Ellie can't have children, it is difficult for her to accept it. At this moment is when the piano solo takes the lead of the music – 0:08:45–. Years have gone by, now as an elderly couple, Carl wants to fulfil their shared dream to go to Paradise Falls. Going back to the park they used to go years ago, Ellie falls and isn't able to go on. The fourth piano solo moment occur while she is in her deathbed and gives her adventure book to his husband – 0:10:43–.

The next time is in minute 0:19:13, when Carl is packing to go to the retirement village and finds by chance Ellie's adventure book. The piano solo is heard during he takes another look at the book.

Then, the piano isn't used again until the midpoint. After having let Charles Muntz to took Kevin and argued with Russell, Carl goes inside the house and rewatch Ellie's book. The piano guides the soundtrack as he finds out that Ellie had completed it with pictures of them and her life was more than enough – 1:12:05 –.

It is just at the end, on the climax of the film, when the piano is used for the last time until the end of the movie – 1:27:34 –. Russell receives his badge at the ceremony with the absence of his parents. It is Carl who goes next to him and give to him the Ellie badge.

Excluding the first piano moment, which accompanies a funny situation, and the melody that draws on the second time the piano can be heard, all the other interventions of the instrument are in a quiet, serene tone.

The sum of this piano moments goes up to 5 minutes and 46 seconds, representing the 6,55 % of the completed film.

II. 3. *Inside Out*

The use of the piano instrument in *Inside Out* is very different than *Up* and *Monsters Inc.* Due to its high predominance among the film, it could be said that the piano is used as the main instrument of the film. In the previous analysed films, the piano is used always with the same theme, in *Inside Out* almost every theme is being played with the piano at some point of the film. The themes that have this particularity are the Main Theme, the Secondary Theme, the Sadness Theme and the Runaway ostinato³⁴. Each one with its own particularities take place on the film with different orchestrations, but when it comes to important plot points, they are played with the piano.

ACT 1	1. Introduction	Riley's life and emotions presentation.
	2. Present day	11-year-old Riley.
	3. Inciting Accident	Moving out to San Francisco.
	4. Plot point 1	Riley gets a sad core memory from the first day of school.
ACT 2	5. Embark on a Journey	Joy and Sadness are sucked out of headquarters.
	6. Pinch I	Bing Bong's rocket is thrown to the Memory Dump. Sadness listens to him and they are able to continue with the journey.
	7. Midpoint	Joy realizes that Sadness is necessary for Riley too.
	8. Pinch II	Bing bong's sacrifice himself to allow Joy to get back to Headquarters.
	9. Plot point II	Joy finds Sadness and plans how to get to Headquarters. Riley can't feel anything.
ACT 3	10. The Road back	Back at Headquarters Sadness is the only one who can bring Riley back.
	11. Climax	Riley explains to her parents how she feels. New core memory with mixed feelings.
	12. New normality	Riley has new islands of personality and a new expanded console. All the family is back home in Minnesota.

Table 4: *Inside Out*'s Alternative Three-act Structure

³⁴ See their transcription in the Appendix 2: Themes transcriptions

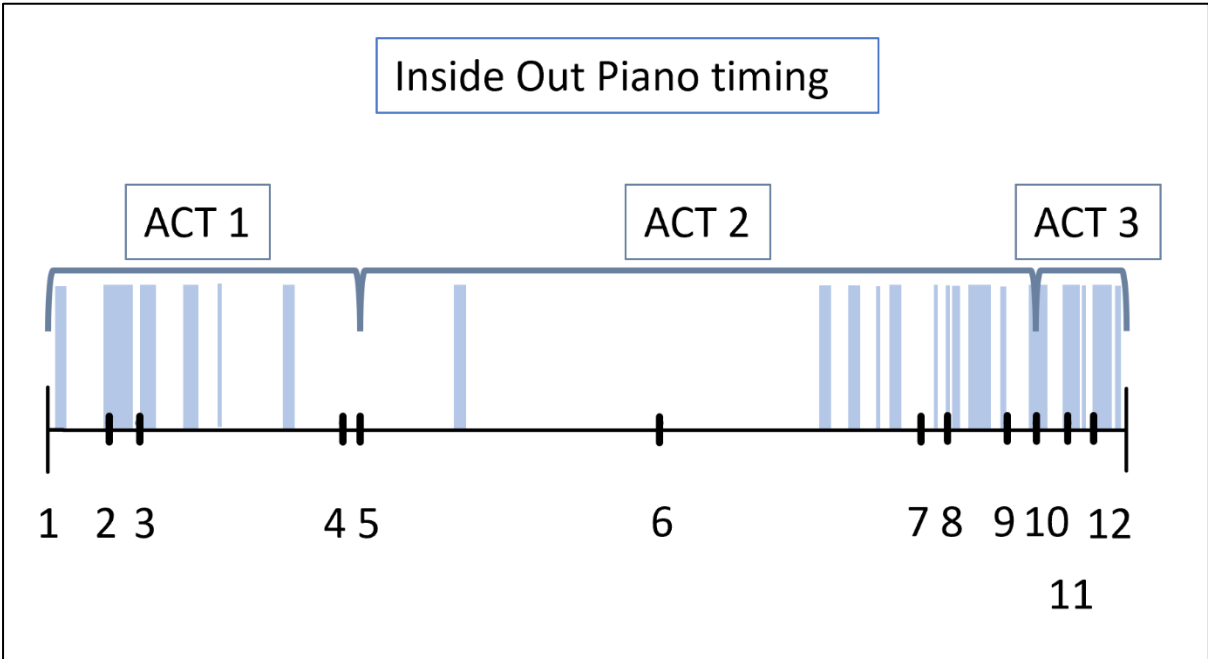


Figure 7: *Inside Out's* Piano timing

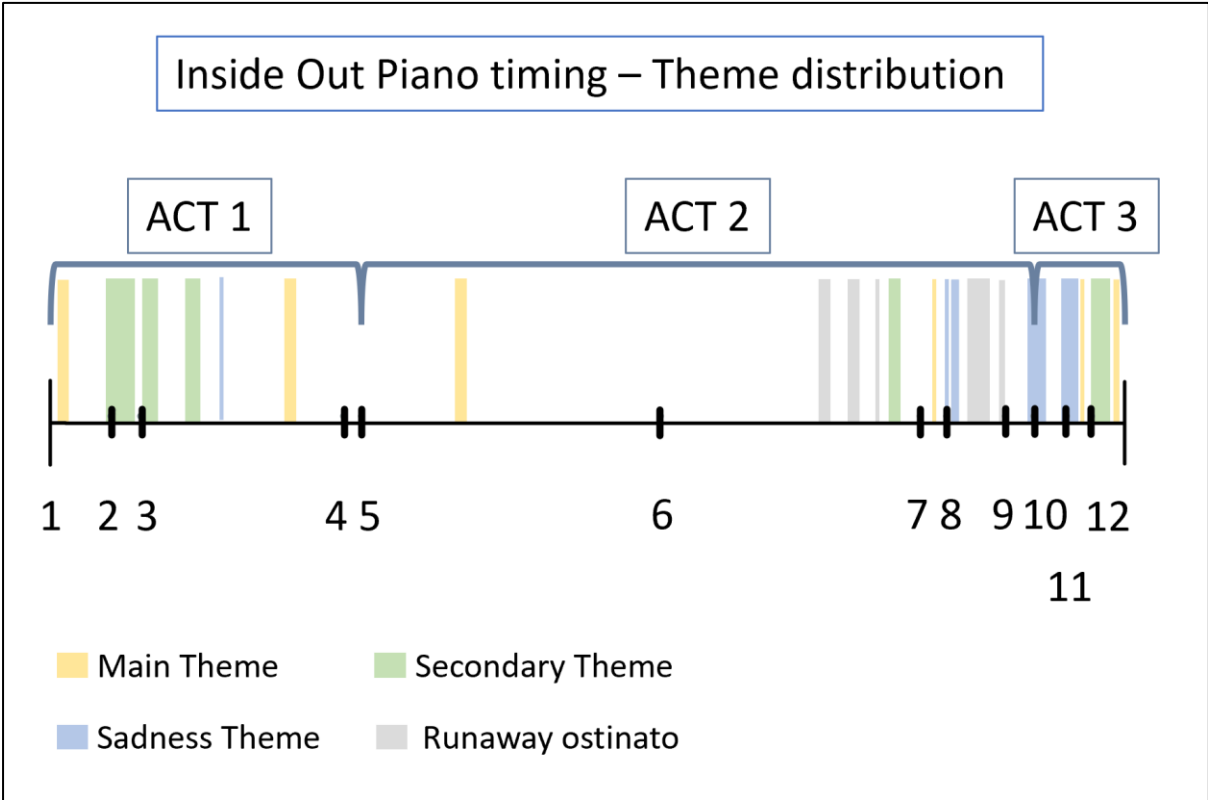


Figure 6: *Inside Out's* Piano timing and theme distribution

II. 3. 1. *Piano placement in the soundtrack*

As said before, there is a considerable importance of the piano in *Inside Out*: its music has 21 points where the piano is clearly used. The first moment is just at the beginning – film minute 0:01:59 –, where Joy and Riley are presented with the Main Theme. The piano does the melody in a high register with the orchestra accompanying it.

The following moment is placed at 0:05:54. Here is being presented the Secondary Theme, which comes after Joy explains all Riley's personality islands and is being heard while Riley's life events are shown from her being a little girl to the present day, a 11-year-old girl. Here the piano does too the melody in a high register and underneath there is a guitar rip with the orchestra.

At 0:07:31 a repetition of the Secondary Theme is played a whole step above with the same orchestration as before while it is being shown all the journey to the new house. And a third time of this Secondary Theme comes again at 0:11:34 at the original key while Riley and her mother are having a nice chat after all the turbulences of the day.

The next piano moment is when Joy tries to make Sadness to be fun – 0:14:09 –. Here is being played with the piano the harmony of Sadness Theme.

The last piano usage in the first act is placed at 0:19:22, where after all the bad day Riley had, Joy recalls a memory of the little girl skating at the lake back home. It is in the same original key but with a serene and peaceful tempo.

The harmony of the Main Theme is being played with the piano at 0:33:45, when Joy is trying to get back to Headquarters with Sadness for the first time.

Then the piano isn't used more until 1:02:37, when a suspenseful chords are heard while Riley takes her mum's credit card to pay for the bus ticket to Minnesota.

At 1:04:02 begins the Runaway Ostinato, when Riley decides to run away and get back home. It is the first time where the piano is used in the mid register. The theme evolves with all the orchestra getting involved in the ostinato and at 1:06:20 the piano is heard again after Joy and Bing Bong fall in the Memory Dump.

The following moment is placed at 1:08:10, where the Secondary Theme is used again in the original key but with a slower tempo and in the mid register of the piano accompanied by soft strings. In this moment, Joy is watching child Riley's memories that will get forgotten.

She only wanted Riley to be happy. At 1:11:01 the Main Theme is shortly used again while Riley and Bing Bong search for the rocket to try to get out of the Memory Dump.

After several attempts of trying to get out of there, Bing Bong realizes that he is being forgotten and sacrifices himself to allow Joy to save herself. The piano plays the chords just accompanying the orchestra – 1:12:27 –. Just after Joy gets safe, she realizes what Bing Bong has made, then the piano playing the Sadness Theme chords with soft strings is used – 1:12:50 –.

Then the Runaway ostinato gets back at 1:13:50 with piano and percussion while Riley is going away and Joy tries to find Sadness. Like before, the theme evolves with other instruments playing it and at 1:16:08 the piano gets back while Fear, Anger and Disgust can no longer make Riley feel anything.

After Joy and Sadness have succeed getting back to Headquarters and Riley being on the Bus, the piano is being used – 1:18:50 –. Sadness makes Riley to return home. At home, while she explains how she really feels to her parents, the Sadness Theme harmony is played with the piano – 1:21:32 –. At 1:23:10 the Main Theme comes back after Sadness and Joy have made an action together with the console. A mixed feeling Core Memory is created and forms a new personality island.

At 1:24:08 the Secondary Theme with the original key and orchestration is being used while the emotions check the new personality islands and the new console upgrade. Finally, the Main Theme is used one last time to close the film while Riley plays Hockey again – 1:25:42 –.

These twenty-one piano moments sum up to 14 minutes and 37 seconds. That is equivalent to the 17,07% of the whole length of the film.

II. 4. Other Pixar films

Until 2021, Pixar Animation Studios has released 24 films. Among them, Randy Newman has been the composer that has collaborated the most with the studios having composed the music for 9 films. The following composer is Michael Giacchino, who has done the film music for 7 different titles.

From these 24 films, the piano instrument has a relevant role in 16 of them. Three of these are *Monsters Inc.*, *Up* and *Inside Out*, which have been detailed explained in the previous subchapters. The other 13 films are commented below.

In *Toy Story 2* the piano has only one important moment in the whole film: when Jessie explains her story to Woody in the song *When She Loved Me* – 0:48:55 –. The song is about how good were the old days when her girl was a child and how Jessie ended up forgotten. The voice is accompanied by piano and soft strings.

Toy Story 3 doesn't have piano relevant moments during the film, only at the end when Andy is donating his toys to Bonnie – 1:31:18 –.

In contrast, *Toy Story 4* has several specific very short moments of the film where the piano is used. They are the following: Forky understands how Bonnie feels – 0:25:26 –, Forky sees the reason why Gabby wants her voice box fixed – 0:42:29 –, Gabby describes the feelings of being with a kid – 1:08:27 –, Gabby finds a lost girl and she finally gets what she always wanted – 1:20:27, 1:21:08, 1:22:18 –.

The piano in *Finding Nemo* has a more important role. It is used with the main theme in its presentation and a couple of times more – 0:04:32, 1:10:30, 1:31:50 – and when there is trouble featuring an ostinato – 1:16:58, 1:28:02 –.

In opposition to *Finding Nemo*, *Finding Dory* has a different use of the piano. This movie uses the piano more frequently in several moments as it is used in various themes as the leading instrument and in other places to accompany the orchestra, just as another instrument. Here are the timing marks of the main theme with the piano being used: 0:02:28, 0:04:42, 0:14:49, 1:06:34, 1:07:21, 1:26:03.

It is also worth remarkable the fact that when Dory meets again her parents, the piano is being used in the film music – 1:09:22 – and it is also used at the end when she recalls when her family told her she could do whatever she proposed – 1:24:34, 1:25:28 –.

In *Cars*, the piano is used two times. On the first one it accompanies the song *Our Town*, when Sally explains how great was the village when the railway didn't exist – 1:11:49 –. And on the second one it is used after Doc Hudson had called the press and McQueen was forced to leave – 1:32:06 –.

Following the same line, *Cars 2* only has 17 seconds of piano and are placed when McQueen says to Mater that he wants to have dinner with Sally instead of him – 0:11:48 –.

Ratatouille has also very few and short piano moments. The first one is at 1:25:34, when Anton Ego asks for perspective instead of food. The second one takes place after Linguini has explained to all the cooks the truth and they leave him alone at the restaurant – 1:30:59 – and the last one occur as Ego leaves the restaurant after he was told the truth about the chef – 1:38:43 –.

Monsters University's use of the piano is limited to only two moments: a soloistic use when Mike is not allowed to continue studying in the Scaring program – 0:30:05 – and an accompaniment moment when they are trying not to get caught in a Scare Games' test – 0:48:56 –.

In contrast to all the already exposed films, *The Good Dinosaur* film music has an extensive use of the piano. Since the beginning – 0:01:39 – it is used as another instrument of the orchestra joining the accompaniment. It is also used for each time the family topic is treated: at 0:08:58 the parents start the marks on the silo; at 0:15:10 and 0:21:11, the marks are shown; at 0:42:24 and 0:43:45 both Arlo and the kid share their feeling of missing their respectively family; at 1:11:17 Arlo's father appears in his imagination; at 1:20:57 the kid is reunited with humans, now he has found a family and the two friends have to say goodbye to each other; and finally at 1:25:11, Arlo can leave his mark on the silo.

Onward has a moderate piano usage. It is employed both sometimes as accompaniment – 0:02:02 – and as soloist in specific times when they talk about dad – 0:14:41, 0:16:00 –; when Barley tries to find a last way to reunite with dad – 1:17:54 –; and when Ian starts reviewing his 'To Do List' he had planned to do with dad and realises that Barley is who has always been there for him – 1:18:35, 1:20:14 –.

Soul has a slightly different use of the piano because of the fact that the main character is a pianist. The piano is mostly used to refer to the terrestrial life whereas when the main characters are in the Great Before synthesized sounds are used more frequently. There is several

piano solo moments. The first one is when Joe plays while he explains his sensation when playing – 0:01:57 –; then with his piano solo at the Dorothea Williams Quartet try-out – 0:06:57 –; when he gets a new suit – 1:04:05 –; when after the concert Joe finds out what is the real meaning of life – 1:17:45, 1:20:58 –; Joe helps 22 – 1:25:36 –; Joe accompanies 22 to the earth – 1:27:21 –; and at the end when Joe is given another chance – 1:29:45 –.

In *Luca*'s soundtrack, the piano is also largely used in different circumstances: Luca is out of the sea for the first time – 0:10:20 –; Luca's mother wants to send him to the bottom of the sea – 0:25:43 –; Luca and Alberto talk about their dreams – 0:41:21 –; Giulia knows the truth and says goodbye to Luca – 1:06:04 –; Alberto explains to Luca that his dad abandoned him – 1:08:11 –; Luca and his parents reunite after the race – 1:18:41 –; Luca is leaving to school – 1:22:19 –.

III. DATA ANALYSIS

III. 1. *Monster's Inc., Up and Inside Out*

Each of the analysed films have a different use of the piano. While the usage in *Up* and *Monsters Inc.* is quite similar due to the limited use of the piano, *Inside Out* uses the piano as a leading instrument during the whole soundtrack.

A similarity that share the three movies is the relation of the use of the piano with the family. In *Monster's Inc.* the viewer has to wait until the end to hear Boo's theme played with the piano. That's because not until the two monsters are forced to say goodbye to Boo consider themselves as a family. Saying goodbye is what makes them realise the affection they have. In *Inside Out*, the piano used in this way takes place not only when Riley's family is presented but also in the plot point where she explains how really feels to her parents, being that a close family moment. And in *Up*, this association with family can be done as well. For Carl, Ellie was his family. Each time that he recalls memories of her, he thinks of his life time together and the piano is being used. Moreover, at the end, when the badge ceremony takes place, the piano has also a relevant role. The reason is that Russell has become a member of Carl's family.

All of these connections can relate the piano as an instrument which is frequently used to describe the feeling of family or friendship. However, some of these moments also turn out

to be sad. So, following this line, it can be said that the piano is attached with family moments but also its soft sound is connected with sadness.

Other affinity that all of them share is the use that is being made of the instrumentation when the action is related with a child. For instance, in the first seconds of *Inside Out* a high registered piano can be heard; in *Up* when Carl and Ellie are wondering on the option of having a child, the piano does the melody in a high register; and in *Monster's Inc.*, when Boo's theme is presented with flute and violin, it is in a high register as well.

In all these cases a child (or the idea of having a child) is being presented, so it could be said that the high registers of some instruments can be related with the idea of children.

These statements go along with what Dr Andrew Simmons explained in the interview³⁵. He linked the utilization of the high register of the instrument with being a child: 'I think the reason why it (*Inside Out*'s main theme) is on piano, in a high register of the piano, is because she is a baby at the start. And it feels very cute.'

Dr Simmons also considered the connection of the family feeling with the use of the piano: 'It (the piano) feels like a very human thing. It's an instrument that could be in people's homes. [...] It feels like a very accessible instrument. There's pianos in schools, and at home it just feels like a natural lovely piece of wood. It's not electronic. There's this human connection.'

And he also commented when the piano is used or not due to the attached sad meaning that it contains: 'That whole sad piano sound with simply chords, we attach it with certain things. That's why he (Michael Giacchino) is carefully deciding: now it's just piano, now we're doing jazz.'

³⁵ Sarró Cases, Núria. "Interview with Andrew Simmons." 28 Jan. 2022, 11 am., video call, 50'.

III. 2. Pixar complete filmography

The particularities extracted from the analysed films fit perfectly with the annotations extracted from the rest of the Pixar films.

When Andy gives away his toys at the end of *Toy Story 3*, as he considered them as members of the family, or in *Toy Story 4*, when Gaby is able to become a member of the little girl's family the piano is being heard. The Nemo main theme presented with the piano describes the family that Marlin and Nemo will begin, or the exact same use takes place in *Finding Dory* when she reunites with her parents. The repeatedly use of the piano each time the family is shown in the *Good Dinosaur* is another example. In *Onward* the instrument is also used several times when it is talked about dad; or in *Luca* when the parents and the kid reunite the piano is heard too.

Another aspect that can be extracted is the correlation of sad moments and the piano usage. The piano is used a handful of times when people are left alone or are saying goodbye. For instance, in *Toy Story 3* when Andy plays with his toys for the last time; when McQueen is discovered and leaves the village in *Cars*; in *Ratatouille* when all the cooks leave after Linguini has explained the truth; in *Monster's University* when Mike is expelled from the Scaring program; when Jo and 22 say goodbye in *Soul*; or in *Luca* when Luca leaves the village to go to school.

With these observations, it can be reassured that the piano is used when the family moment takes place and when a sad scene is happening.

Combining all of these notes extracted from all of the Pixar movies, a classification of the use of the piano could be made (Table 5). Throughout a film, the piano can have multiple uses, that is the reason why some of them are repeated in more than one label.

<u>Relationship</u>	It is mostly related with family and friends or sad points of the film.
	<i>Monster's Inc., Toy Story 3, Toy Story 4, Finding Nemo, Finding Dory, Ratatouille, Up, Cars 2, The Good Dinosaur, Onward, Soul, Luca</i>
<u>Remembering the old days</u>	The piano is the accompaniment of a song that explains how good were things in past times.
	<i>Toy Story 2, Cars</i>
<u>Main instrument</u>	The piano leads the main theme throughout the majority of the film.
	<i>Finding Dory, Inside Out, Soul</i>
<u>Piano as part of the orchestra</u>	The piano is noticeable in the accompaniment but it isn't leading the theme.
	<i>Monsters Inc., Finding Nemo, The Incredibles, The Incredibles 2, Monsters University, The Good Dinosaur, Finding Dory, Onward, Soul, Luca</i>

Table 5: Clasification of the piano usage in Pixar's film music

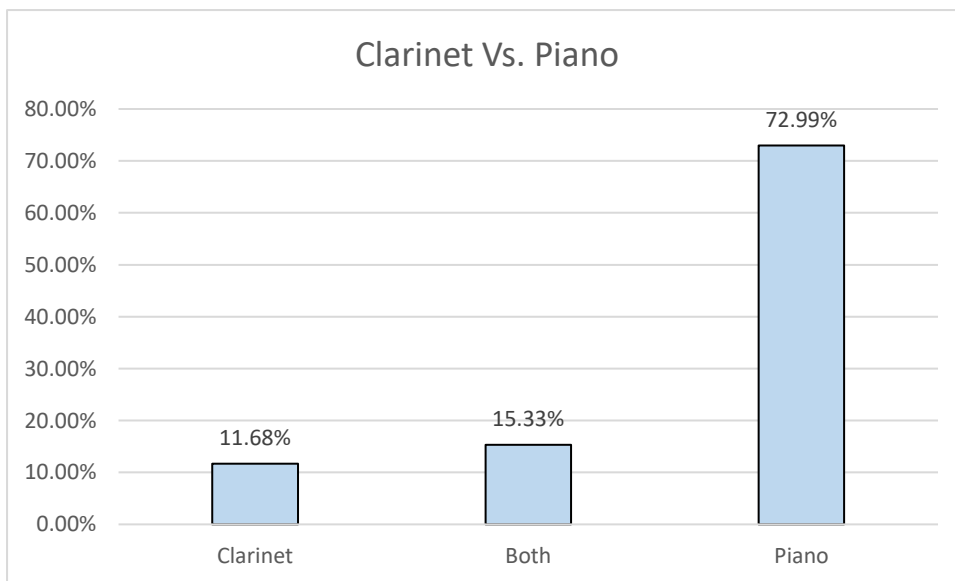
IV. BRIEF SURVEY COMMENTARY

Two-hundred and thirty people among ten and ninety-six years old answered the survey. 41,74% of the respondents have musical studies. The 66,09% of all of the respondents had seen the film. Asking for the emotional category in which would each respondent classify that excerpt, sadness (74,78%) and happiness (23,91%) were the most chosen.

As can clearly be seen in the following graphs (Graphic 1 - 4), when the respondents were asked for their preference among the piano version or the one with other instruments, the vast majority preferred the piano. In all the instrument categories, the piano won above the 63% of the answers. The cello was the second most preferred with the 16,46% of favourable results. And the flute with a 21,85% was the instrument that more people chose to be as suitable as the piano.

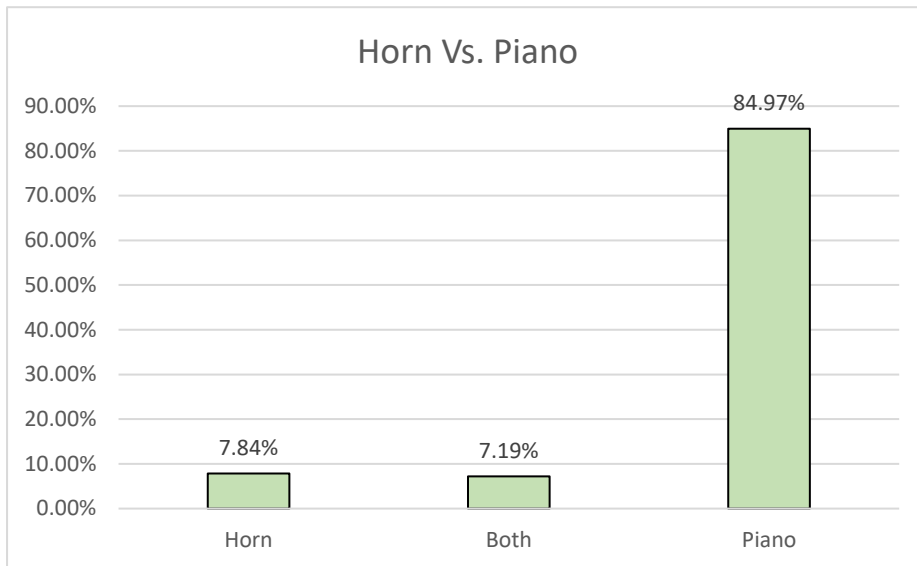
The piano has been the preferred instrument by the majority of the respondents. Seeing that the majority has also categorized the film excerpt as ‘sad’ and ‘happy’, a relation with the piano sound could be made. It could be said that the piano represents better these emotions than the other selected instruments (clarinet, flute, cello and horn.).

At the end of this Paper can be found the layout of the survey and all the data that have been extracted from it³⁶.

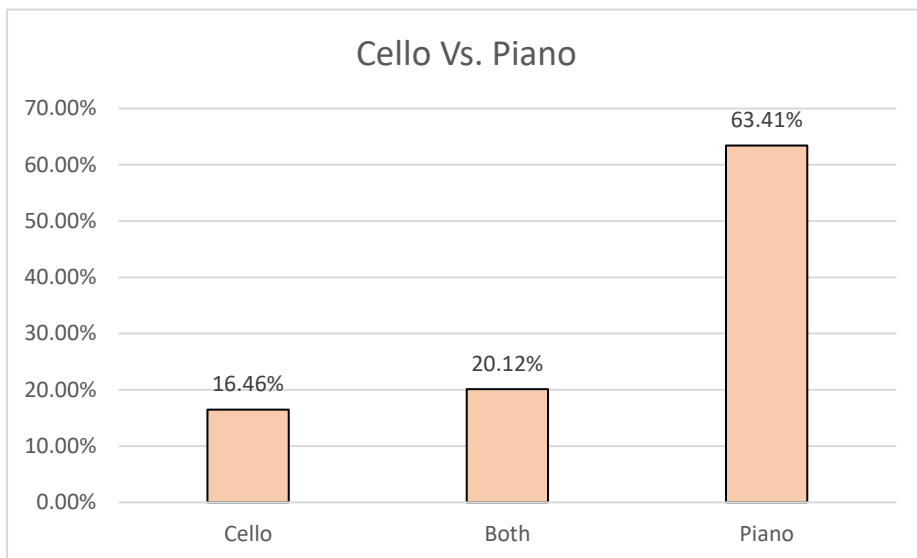


Graphic 1: Preference between clarinet and piano

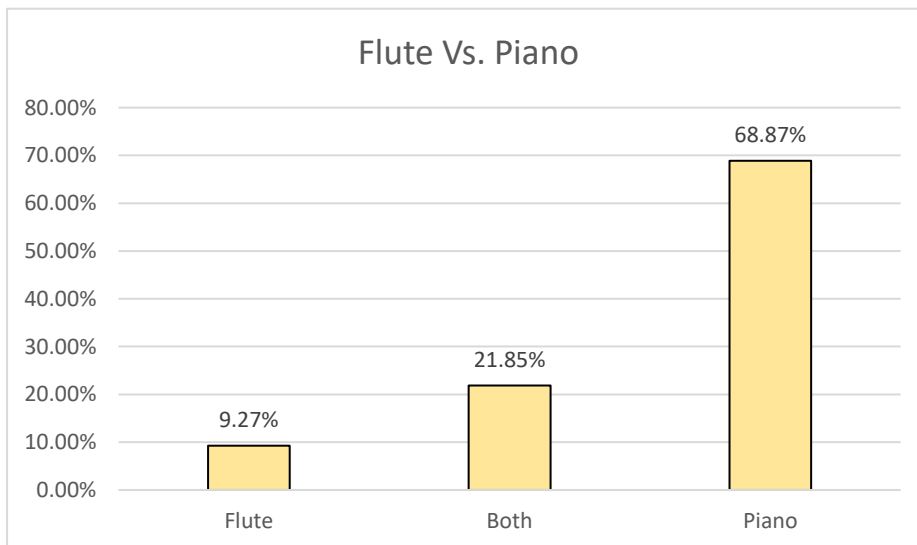
³⁶ See Appendix 4: Survey layout and Appendix 5: Survey results



Graphic 4: Preference between horn and piano



Graphic 2: Preference between cello and piano



Graphic 3: Preference between flute and piano

V. DEMONSTRATION OF THE HYPOTHESIS

The principal hypothesis of this paper is to believe that the piano is used in three specific points of the plot: when all the hope is lost, the main character realizes something important or at the end of the film. Taking into account all the research that has been made and all the data that has been analysed and compared, it can be said that the hypothesis was partially right. Although the selected moments are right, they are incomplete due to the fact that the piano is used in more ways than previously thought.

As it is exposed in the third chapter, Data Analysis, the piano is most frequently used in moments related with relationships and sadness. Although it turns out that the three specific plot points of the hypothesis also share these specifications, they don't cover all the piano moments, meaning that it wasn't clearly detailed. That is the reason why the hypothesis is announced as partly right.

VI. CONCLUSIONS

The main objective of this Paper is to find if there is a pattern of the piano usage in the animated Pixar films. At the beginning of this research, there are exposed the moments where it is previously believed that the piano takes the lead of the film music: when all the hope is lost, the main character realizes something important or at the end of the film. With this investigation being made, it has been checked that the piano is used not only in these moments but also in other occasions too. The instrument isn't used in function of the plot points, it is employed depending on the events of the film although some of these events happen to occur in these mentioned plot points.

Having stated that information, here are four ways in which the piano has been used in Pixar's film music:

- When the action is related with relationships, as they can be of family, partners or friends and can also be happy or sad.
- A song with the piano as accompaniment whose lyrics explain how good was a previous situation that has apparently changed forever.

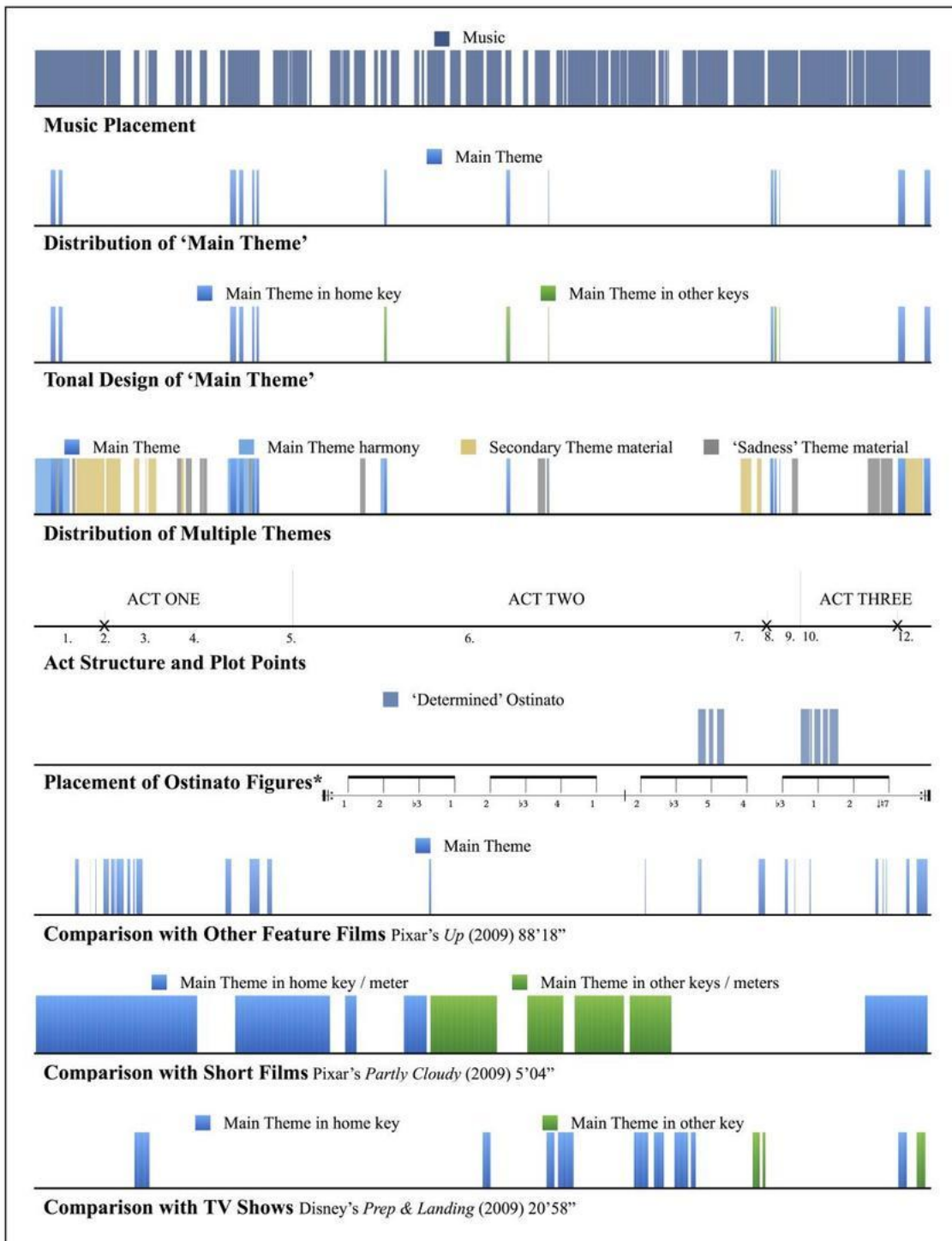
- Piano used as the principal instrument of the soundtrack.
- Piano used as another instrument of the orchestra without having a direct symbolic intention.

Alongside this research, the survey can also provide another factor to validate this theory. The majority of the respondents (74,78%) consider that scene from *Up* as a sad moment. The second most chosen emotional category is happiness (23,91%). These results state that the piano fits well in these type of situations and can be linked with these emotions.

This reaffirms that the piano is the most preferred instrument in these happy or sad situations related with relationships. This fact conforms the pattern that composers tend to use when it comes to piano solo moments in the film music.

The piano is used in special occasions to emphasise a concrete moment of the story and make it more meaningful. However, it is not always used to give that level of symbolism in a scene and then it is only utilized as another colour of the instrumentation for no other reason than the composer liked that way. At the end it is the film as a whole what creates the atmosphere in which the spectator will immerse, and the choice of the instrumentation in the film music is what influences the perception of these relevant events of the film.

APPENDIX 1: Thematic Distribution Model by Andrew Simmons



*notation based on the Numerical System of Melodic Notation (Zinn, 1981: 29-47).

APPENDIX 2: Themes transcriptions

Monster's Inc.: Boo's Theme

Musical notation for Boo's Theme in E major, 4/4 time. The melody consists of two lines of music. The first line contains five measures with chords: E/B, Bdism., B, E, C#m, and C#m/B. The second line contains five measures with chords: F#A, F#, B, Bdism., and B. The piece concludes with a double bar line.

Up: Ellie's Theme

Musical notation for Ellie's Theme in F major, 3/4 time. The melody is spread across four lines of music. The first line has chords F maj7, F/E, F/D, and F/C. The second line has chords G9, G/D, G9, and C. The third line has chords C7 and F/C. The fourth line has a C7 chord. The piece concludes with a double bar line.

Inside Out: Main Theme

G maj7




F maj7




Inside Out: Secondary Theme

C G7(sus4) C G7(sus4) C G7(sus4) C



G7(sus4) C G7(sus4) C G7(sus4) C G7(sus4) C G7(sus4)



F Em Dm C F Em Dm G G7



Inside Out: Sadness Theme

G Bm C Am



Inside Out: Runaway ostinato



APPENDIX 3: Films' timings

Monster's Inc. data

Plot Point	Timing	%	Unit
1	0.00	0.00	0.000
2	3.33	3.98	0.597
3	20.85	24.92	3.798
4	26.16	31.27	5.607
5	29.58	46.48	6.972
6	47.41	56.68	8.502
7	56.16	67.13	10.069
8	63.30	75.67	11.350
9	64.78	77.44	11.616
10	70.88	84.74	12.711
11	76.25	91.15	13.672
12	79.90	95.52	14.328

Timing ₁	Timing ₂	Diff. (sec.)	% ₁	% ₂	Diff. %	Unit ₁	Unit ₂
76.85	77.46	37	91.87	92.60	0.73	13.780	13.890
78.15	78.56	23	93.42	93.88	0.46	14.013	14.082
82.78	83.60	49	98.96	99.94	0.98	14.844	14.991
Total		109			2.17		

Up data

Plot Point	Timing	%	Unit
1	0.00	0.00	0.000
2	10.86	12.30	1.845
3	17.16	19.44	2.916
4	18.72	21.22	3.183
5	20.83	23.59	3.538
6	47.21	53.48	8.022
7	67.23	76.15	11.422
8	77.00	87.22	13.083
9	83.18	94.22	14.133
10	84.76	96.01	14.401
11	86.63	98.13	14.719
12	-	-	-

Timing ₁	Timing ₂	Diff. (sec.)	% ₁	% ₂	Diff. %	Unit ₁	Unit ₂
3.96	4.31	21	4.49	4.88	0.39	0.673	0.732
7.51	7.73	13	8.50	8.75	0.25	1.275	1.312
8.03	8.48	27	9.09	9.60	0.51	1.363	1.440
10.00	10.82	49	11.32	12.25	0.93	1.698	1.837
18.51	19.63	67	20.97	22.23	1.26	3.145	3.334
71.36	72.81	87	80.83	82.47	1.64	12.124	12.370
86.85	88.23	83	98.37	99.94	1.57	14.757	14.990
Total		347			6.55		

Inside Out data

Plot Point	Timing	%	Unit
1	0.00	0.00	0.000
2	5.40	6.31	0.940
3	6.63	7.75	1.160
4	23.36	27.32	4.090
5	24.18	28.29	4.240
6	48.71	56.99	8.540
7	69.31	81.09	12.160
8	71.63	83.79	12.560
9	75.60	88.44	13.260
10	78.23	91.51	13.720
11	80.65	94.34	14.150
12	83.10	97.21	14.580

Timing ₁	Timing ₂	Diff. (sec.)	% ₁	% ₂	Diff. %	Unit ₁	Unit ₂
1.16	1.83	40	1.35	2.14	0.79	0.20	0.32
5.08	6.43	81	5.94	7.52	1.58	0.89	1.12
6.70	7.51	49	7.84	8.78	0.94	1.17	1.31
10.75	11.51	46	12.57	13.46	0.89	1.88	2.02
13.33	13.55	13	15.59	15.85	0.26	2.33	2.37
18.55	19.15	36	21.70	22.40	0.7	3.25	3.36
32.93	33.21	17	38.52	38.85	0.33	5.77	5.83
61.80	62.30	30	72.29	72.88	0.59	10.84	10.93
63.21	63.95	44	73.94	74.81	0.87	11.09	11.22
65.51	65.68	10	76.63	76.83	0.2	11.49	11.52
67.35	68.35	60	78.79	79.96	1.17	11.81	11.99
70.20	70.41	13	82.12	82.37	0.25	12.31	12.35
71.63	71.85	13	83.79	84.05	0.26	12.56	12.60
72.02	72.81	48	84.25	85.18	0.93	12.63	12.77
73.02	74.61	96	85.42	87.28	1.86	12.81	13.09
75.32	75.62	18	88.11	88.46	0.35	13.21	13.27
78.02	78.85	50	91.27	92.24	0.97	13.69	13.87
80.72	81.80	65	94.43	95.69	1.26	14.16	14.35
82.35	83.00	39	96.34	97.09	0.75	14.45	14.56
83.32	84.63	79	97.47	99.00	1.53	14.63	14.85
84.88	85.38	30	99.29	99.88	0.59	14.89	14.98
Total		877			17.07		



APPENDIX 4: Survey layout

The survey can be found here: <https://forms.gle/KkqAajfvMWvLcB3G8>

Enquesta TFG/ Final Project Survey

Hola!

En el meu Treball Final de Grau he analitzat algunes bandes sonores de l'estudi d'animació Pixar per mirar la utilització de certs instruments en moments concrets de les pel·lícules. Aquest qüestionari té una durada d'entre 4 i 10 minuts en funció de les respostes que donis. Es tracta de mirar un petit fragment de la pel·lícula UP, respondre a les preguntes i comparar-lo amb altres versions del mateix. Està tot explicat detalladament. Les respostes són completament anònimes. Moltes gràcies per participar!

- ESP - Encuesta TFG

Hola!

En mi Trabajo Final de Grado he analizado algunas bandas sonoras del estudio de animación Pixar para observar la utilización de ciertos instrumentos en momentos concretos de las películas. Este cuestionario tiene una duración de entre 4 y 10 minutos en función de las respuestas que des. Se trata de ver un pequeño fragmento de la película UP, responder a las preguntas y compararlo con otras versiones del mismo. Está todo explicado detalladamente. Las respuestas son completamente anónimas. Muchas gracias por participar!

- ENG - Final Project Survey

Hello!

In my Final Project I have analyzed some Pixar Studios' soundtracks in order to see the usage of certain instruments at specific times in the films. This survey takes between 4 and 10 minutes, it depends on the answers that you give. It consists in watching a short scene of the UP movie, answering the questions and comparing it with other versions of the same extract. Everything is explained in detail. The answers are completely anonymous. Thank you very much for taking part!

Informació personal / Información personal / Personal details

Edat / Edad / Age *

- 5-15
- 16-20
- 21-25
- 26-30
- 31-35
- 36-45
- 46-55
- 56-65
- 66-75
- 76-85
- 86-99

Identitat de gènere / Identidad de género / Gender identity *

- Femení / Femenino / Female (including transgender women)
- Masculí / Masculino / Male (including transgender men)
- Non-binary/ Non-conforming
- Gender-fluid
- Prefereixo no dir-ho / Prefiero no especificar / Prefer not to say
- Altres: _____

Tens estudis musicals? / Tienes estudios musicales? / Have you studied music? *

- Sí / Yes
- No

Has vist la pel·lícula UP? / Has visto la película UP? / Have you seen the UP movie?

*



Sí / Yes

No

- CAT - Mira el vídeo i respon. Si no has vist UP o no la recordes, aquí tens un breu resum (si te'n recordes pots mirar el vídeo directament):

Resum: Després de la mort de la seva dona, en Carl és forçat a anar a una residència però decideix fer realitat el somni que tenien ells dos de petits: viure una aventura a Sud Amèrica. Amb globos enlaira la casa per arribar-hi. Pel camí es troba un nen explorador, amb qui forja una bonica amistat, i se n'adona de la preciosa vida que va viure amb la seva dona i de la que té ara.

- ESP - Mira el vídeo y responde. Si no has visto UP o no la recuerdas, aquí tienes un breve resumen (si la recuerdas puedes mirar el vídeo directamente):

Resumen: Después de la muerte de su mujer, Carl es forzado a ir a un asilo pero decide hacer realidad el sueño que los dos compartían de pequeños: vivir una aventura en Sud América. Con globos despegó la casa para llegar al sitio. Por el camino se encuentra con un niño explorador, con quien forja una bonita amistad, y se da cuenta de la preciosa vida que vivió con su mujer y de la que tiene ahora.

- ENG - Watch the video and answer. If you haven't seen the movie or you don't remember it, here's a brief summary (if you remember it you can go straight to the video):

Summary: After his wife death, Carl is forced into a retirement home but instead he decides to make their childhood dream come true: live an adventure in South America. He takes off his house with balloons to go there. Along the journey he meets an explorer boy, with whom bonds a beautiful friendship, and realises the precious life he had lived with his wife and the one that has now.



(·) - CAT - Després d'haver vist el vídeo, quina categoria emocional utilitzaries per descriure'!?

(·) - ESP - Después de haber visto el vídeo, con cuál categoría emocional lo describirías?

(·) - ENG - After having watched the video, with which emotional category would you describe it?

(-) Tria'n una / Escoje una / Choose one *

- Por / Miedo / Fear
- Avorrimient / Aburrimiento / Boredom
- Fàstic / Asco / Disgust
- Tristesesa / Tristeza / Sadness
- Sorpresa / Surprise
- Felicitat / Felicidad / Happiness
- Ira / Anger

Tria el que vulguis / Escoje lo que quieras / Choose what you want

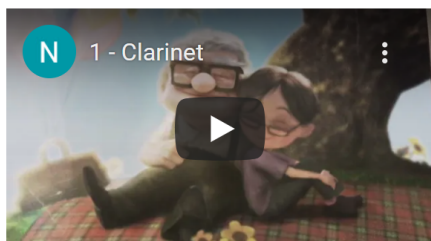
- CAT - Cada opció et porta a un lloc diferent per continuar, tu esculls ;)
- ESP - Cada opción te lleva a un lugar diferente para continuar, tu escoges ;)
- ENG - Each option brings you to a different place in order to continue, you choose ;)

Tria una opció / Escoje una opción / Choose an option

- Opció 2
- Opció 4
- Opció 1
- Opció 3

1 - Clarinet

- CAT - Mira el vídeo i respon les preguntes.
- ESP - Mira el vídeo y responde las preguntas.
- ENG - Watch the video and answer the questions.



(a) - CAT - Comparant-ho amb el 1r vídeo, quin instrument t'agrada més en aquest fragment?

(a) - ESP - Comparándolo con el 1r vídeo, ¿cuál instrumento te gusta más en este fragmento?

(a) - ENG - Comparing it with the 1st video, which instrument do you like the most in this extract?

(a) Tria / Choose *

- Piano
- Clarinet
- Els dos per igual / Los dos por igual / Both of them

(b) - CAT - Segons la situació emocional que es presenta, com trobes d'adient l'elecció de l'instrument per a aquest fragment? (1 = gens - 5 = molt)

(b) - ESP - Según la situación emocional que se presenta, ¿cómo encuentras de adecuada la elección del instrumento para este fragmento? (1 = nada - 5 = mucho)

(b) - ENG - With the given the emotional situation, do you find the election of the instrument for this extract suitable? (1 = not at all - 5 = a lot)

(b) Tria / Choose *

	1	2	3	4	5
Piano	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Clarinet	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

(·) Tens alguna observació? / Tienes alguna observación? / Do you have any comments?

La vostra resposta

(·) - CAT - Tens més temps?

Si vols continuar responent i fer una altra pregunta em faràs un favor :) [vigila de no repetir les opcions].
Si no et va bé seguir envia les respostes. Moltes gràcies!

(·) - ESP - ¿Tienes más tiempo?

Si quieres seguir respondiendo y hacer otra pregunta me harás un favor :) [vigila de no repetir opciones].
Si no te va bien continuar envia las respuestas. Muchas gracias!

(·) - ENG - Do you have more time?

If you want to keep answering and take more questions you will do me a favor :) [be careful not to repeat options].
If it isn't possible for you to continue, send the answers. Thank you very much!

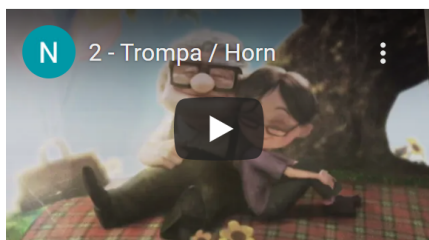
(·) Tens més temps? / Tienes más tiempo? / Do you have more time? *

Continuar / Continue

Enviar les respostes / Enviar las respuestas / Send the answers

2 - Trompa / Horn

- CAT - Mira el vídeo i respon les preguntes.
- ESP - Mira el vídeo y responde las preguntas.
- ENG - Watch the video and answer the questions.



(a) - CAT - Comparant-ho amb el 1r vídeo, quin instrument t'agrada més en aquest fragment?

(a) - ESP - Comparándolo con el 1r vídeo, ¿cuál instrumento te gusta más en este fragmento?

(a) - ENG - Comparing it with the 1st video, which instrument do you like the most in this extract?

(a) Tria / Choose *

- Piano
- Trompa / Horn
- Els dos per igual / Los dos por igual / Both of them

(b) - CAT - Segons la situació emocional que es presenta, com trobes d'adient l'elecció de l'instrument per a aquest fragment? (1 = gens - 5 = molt)

(b) - ESP - Según la situación emocional que se presenta, ¿cómo encuentras de adecuada la elección del instrumento para este fragmento? (1 = nada - 5 = mucho)

(b) - ENG - With the given the emotional situation, do you find the election of the instrument for this extract suitable? (1 = not at all - 5 = a lot)

(b) Tria / Choose *

	1	2	3	4	5
Piano	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Trompa / Horn	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

(·) Tens alguna observació? / Tienes alguna observación? / Do you have any comments?

La vostra resposta

(·) - CAT - Tens més temps?

Si vols continuar responnent i fer una altra pregunta em faràs un favor :) [vigila de no repetir les opcions].
Si no et va bé seguir envia les respostes. Moltes gràcies!

(·) - ESP - ¿Tienes más tiempo?

Si quieres seguir respondiendo y hacer otra pregunta me harás un favor :) [vigila de no repetir opciones].
Si no te va bien continuar envia las respuestas. Muchas gracias!

(·) - ENG - Do you have more time?

If you want to keep answering and take more questions you will do me a favor :) [be careful not to repeat options].
If it isn't possible for you to continue, send the answers. Thank you very much!

(·) Tens més temps? / Tienes más tiempo? / Do you have more time? *

Continuar / Continue

Enviar les respostes / Enviar las respuestas / Send the answers

3 - Violoncel / Cello

- CAT - Mira el vídeo i respon les preguntes.
- ESP - Mira el vídeo y responde las preguntas.
- ENG - Watch the video and answer the questions.



(a) - CAT - Comparant-ho amb el 1r vídeo, quin instrument t'agrada més en aquest fragment?

(a) - ESP - Comparándolo con el 1r vídeo, ¿cuál instrumento te gusta más en este fragmento?

(a) - ENG - Comparing it with the 1st video, which instrument do you like the most in this extract?

(a) Tria / Choose *

- Piano
- Violoncel / Cello
- Els dos per igual / Los dos por igual / Both of them

(b) - CAT - Segons la situació emocional que es presenta, com trobes d'adient l'elecció de l'instrument per a aquest fragment? (1 = gens - 5 = molt)

(b) - ESP - Según la situación emocional que se presenta, ¿cómo encuentras de adecuada la elección del instrumento para este fragmento? (1 = nada - 5 = mucho)

(b) - ENG - With the given the emotional situation, do you find the election of the instrument for this extract suitable? (1 = not at all - 5 = a lot)

(b) Tria / Choose *

	1	2	3	4	5
Piano	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Violoncel / Cello	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Tens alguna observació? / Tienes alguna observación? / Do you have any comments?

La vostra resposta _____

(·) - CAT - Tens més temps?

Si vols continuar responnent i fer una altra pregunta em faràs un favor :) [vigila de no repetir les opcions].
Si no et va bé seguir envia les respostes. Moltes gràcies!

(·) - ESP - ¿Tienes más tiempo?

Si quieres seguir respondiendo y hacer otra pregunta me harás un favor :) [vigila de no repetir opciones].
Si no te va bien continuar envía las respuestas. Muchas gracias!

(·) - ENG - Do you have more time?

If you want to keep answering and take more questions you will do me a favor :) [be careful not to repeat options].
If it isn't possible for you to continue, send the answers. Thank you very much!

(·) Tens més temps? / Tienes más tiempo? / Do you have more time? *

Continuar / Continue

Enviar les respostes / Enviar las respuestas / Send the answers

4 - Flauta / Flute

- CAT - Mira el vídeo i respon les preguntes.

- ESP - Mira el vídeo y responde les preguntes.

- ENG - Watch the video and answer the questions.



(a) - CAT - Comparant-ho amb el 1r vídeo, quin instrument t'agrada més en aquest fragment?

(a) - ESP - Comparándolo con el 1r vídeo, ¿cuál instrumento te gusta más en este fragmento?

(a) - ENG - Comparing it with the 1st video, which instrument do you like the most in this extract?

(a) Tria / Choose *

- Piano
- Flauta / Flute
- Els dos per igual / Los dos por igual / Both of them

(b) - CAT - Segons la situació emocional que es presenta, com trobes d'adient l'elecció de l'instrument per a aquest fragment? (1 = gens - 5 = molt)

(b) - ESP - Según la situación emocional que se presenta, ¿cómo encuentras de adecuada la elección del instrumento para este fragmento? (1 = nada - 5 = mucho)

(b) - ENG - With the given the emotional situation, do you find the election of the instrument for this extract suitable? (1 = not at all - 5 = a lot)

(b) Tria / Choose *

	1	2	3	4	5
Piano	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Flauta / Flute	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Tens alguna observació? / Tienes alguna observación? / Do you have any comments?

La vostra resposta

(.) - CAT - Tens més temps?

Si vols continuar responnent i fer una altra pregunta em faràs un favor :) [vigila de no repetir les opcions].
Si no et va bé seguir envia les respostes. Moltes gràcies!

(.) - ESP - ¿Tienes más tiempo?

Si quieres seguir respondiendo y hacer otra pregunta me harás un favor :) [vigila de no repetir opciones].
Si no te va bien continuar envía las respuestas. Muchas gracias!

(.) - ENG - Do you have more time?

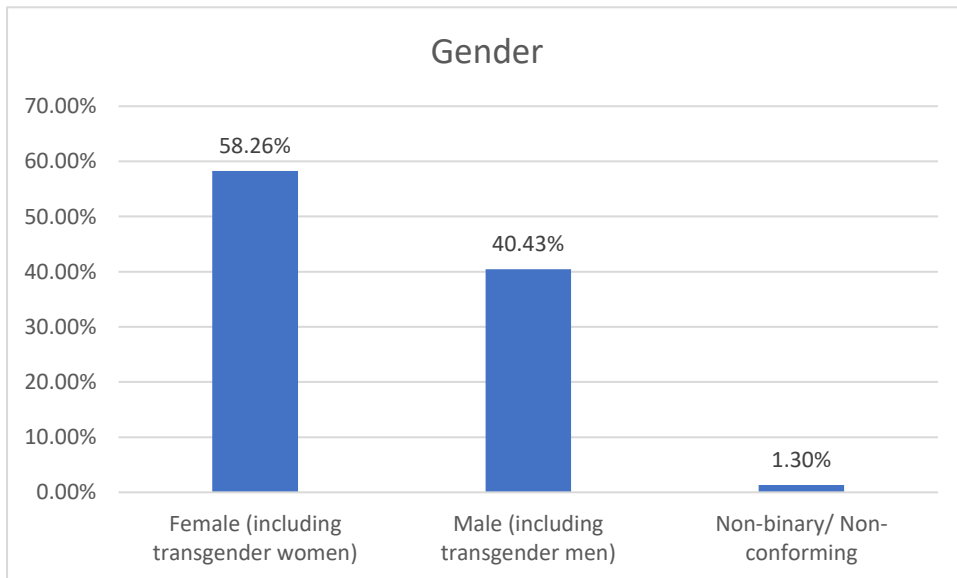
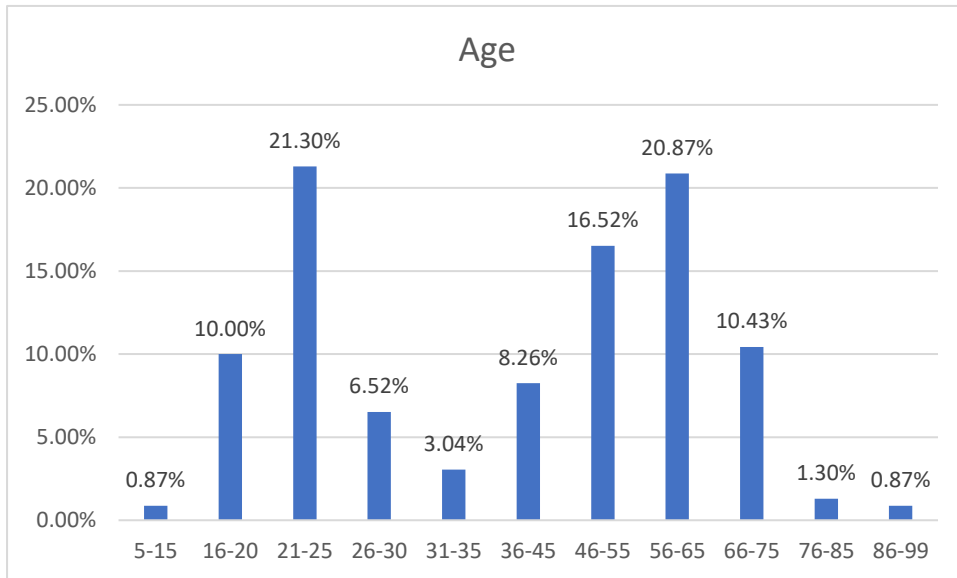
If you want to keep answering and take more questions you will do me a favor :) [be careful not to repeat options].
If it isn't possible for you to continue, send the answers. Thank you very much!

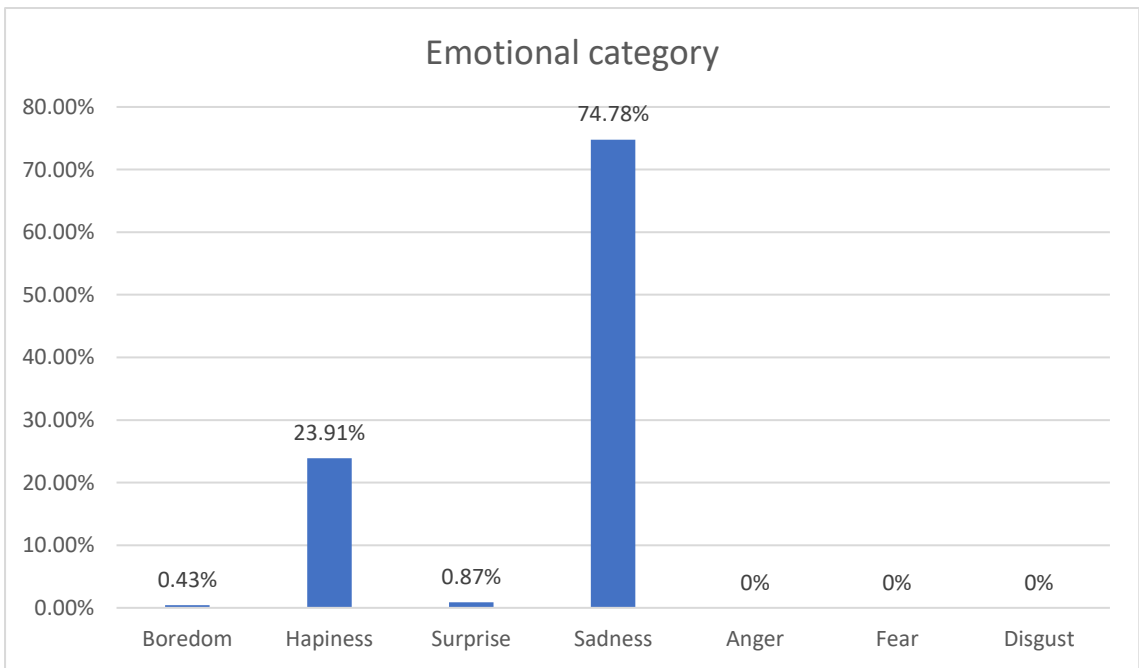
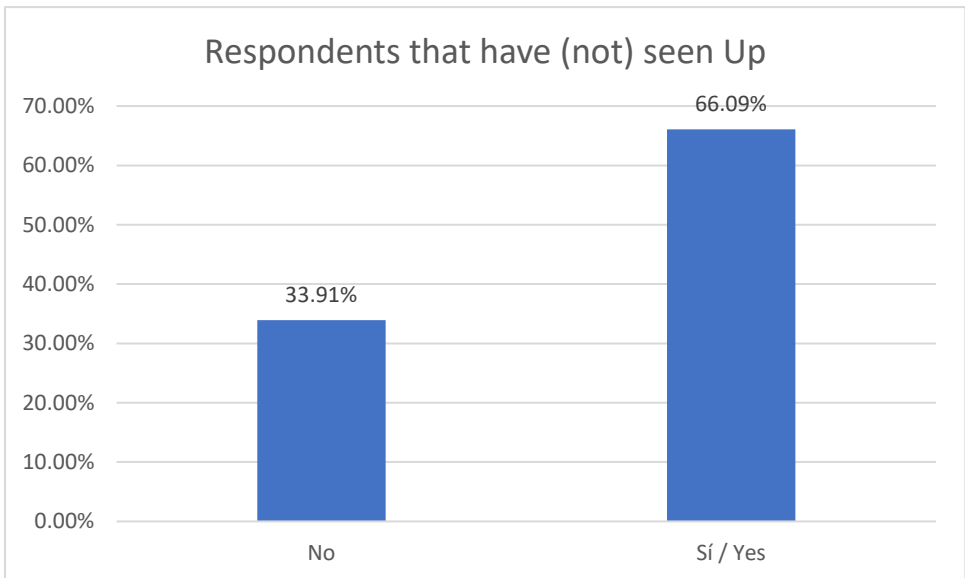
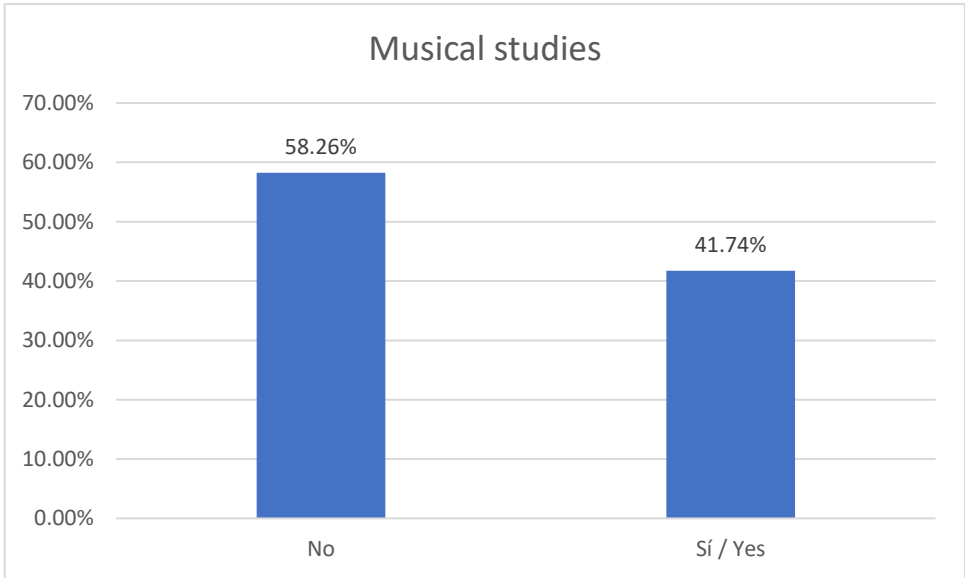
(.) Tens més temps? / Tienes más tiempo? / Do you have more time? *

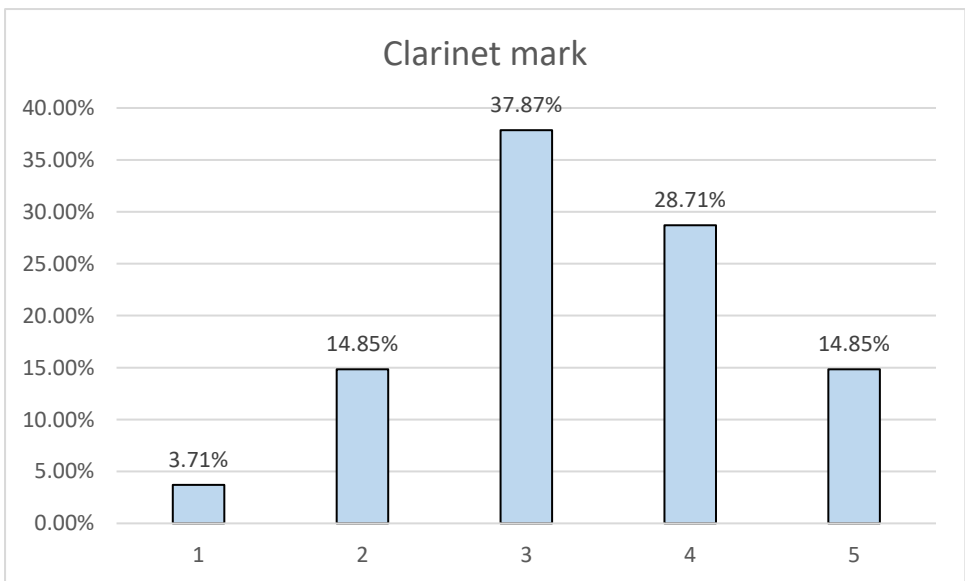
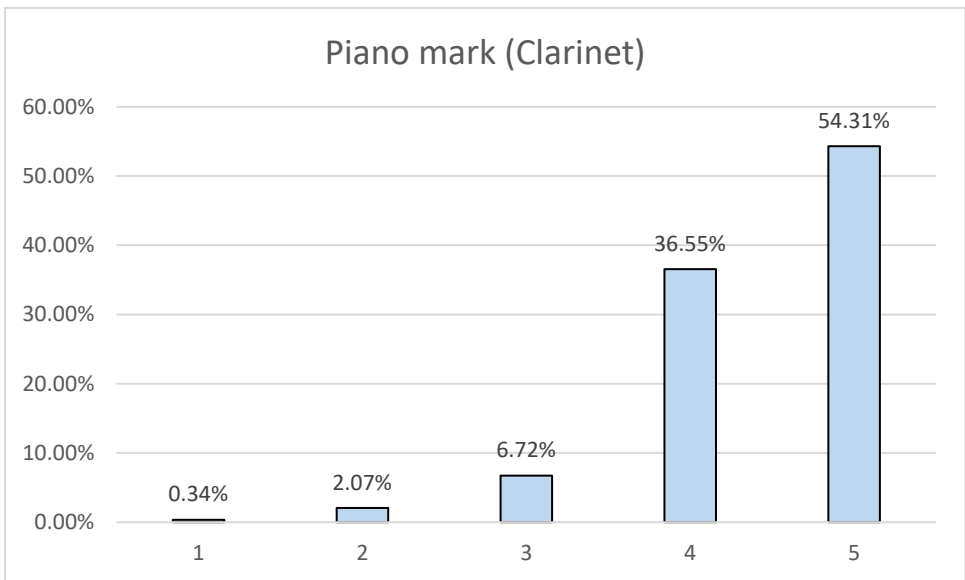
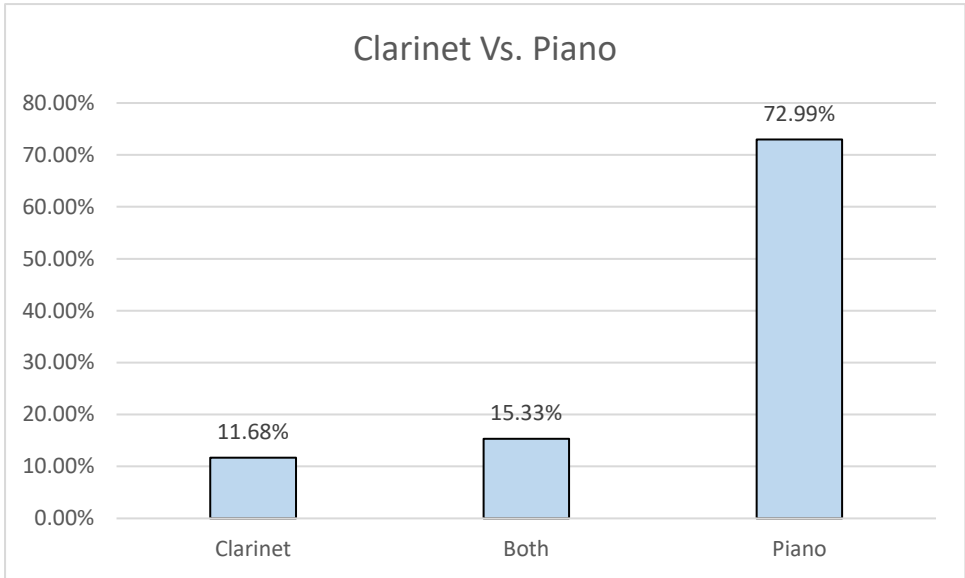
Continuar / Continue

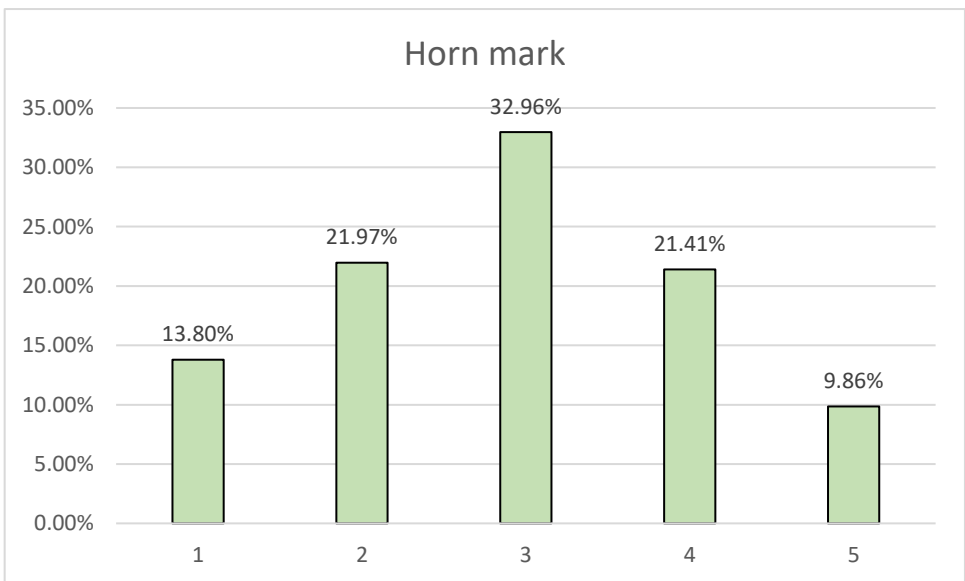
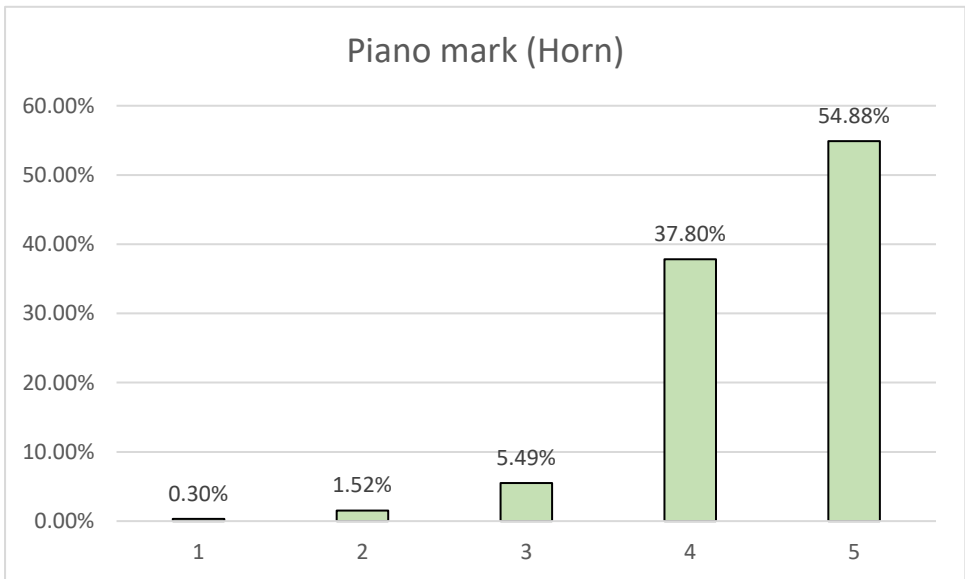
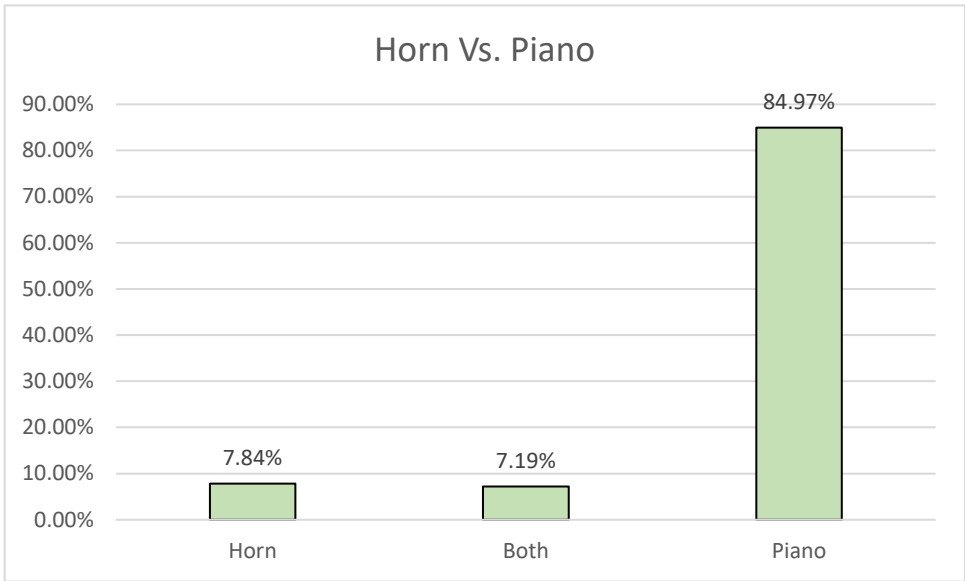
Enviar les respostes / Enviar las respuestas / Send the answers

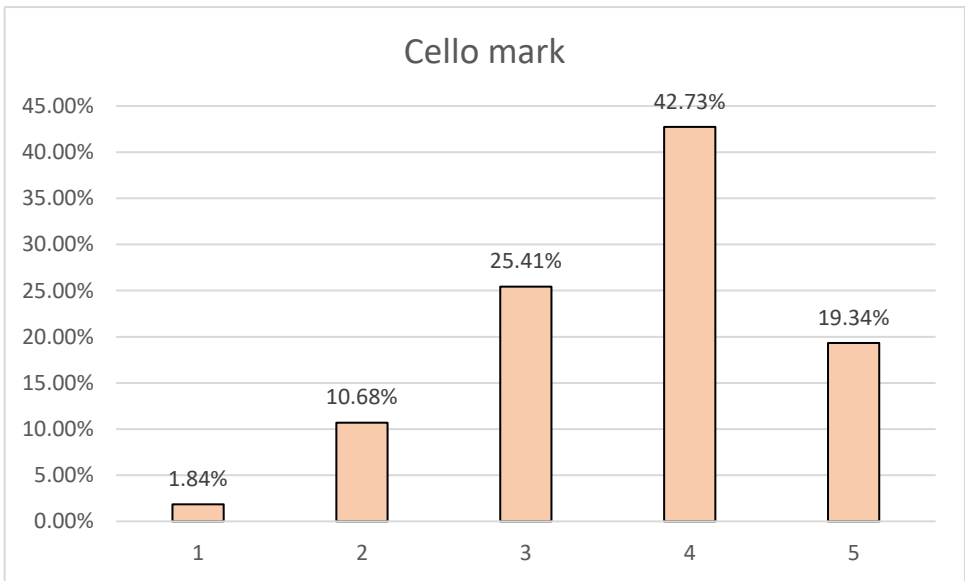
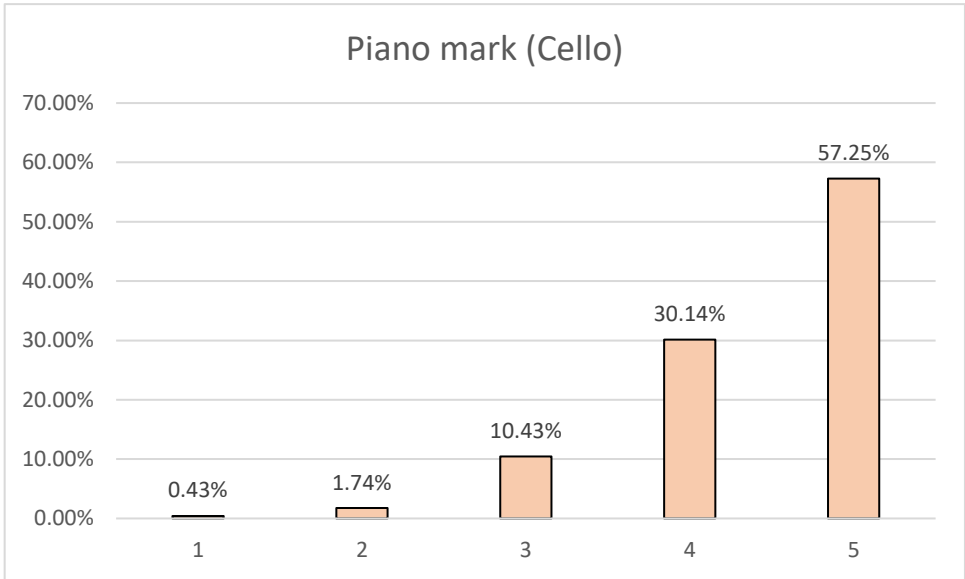
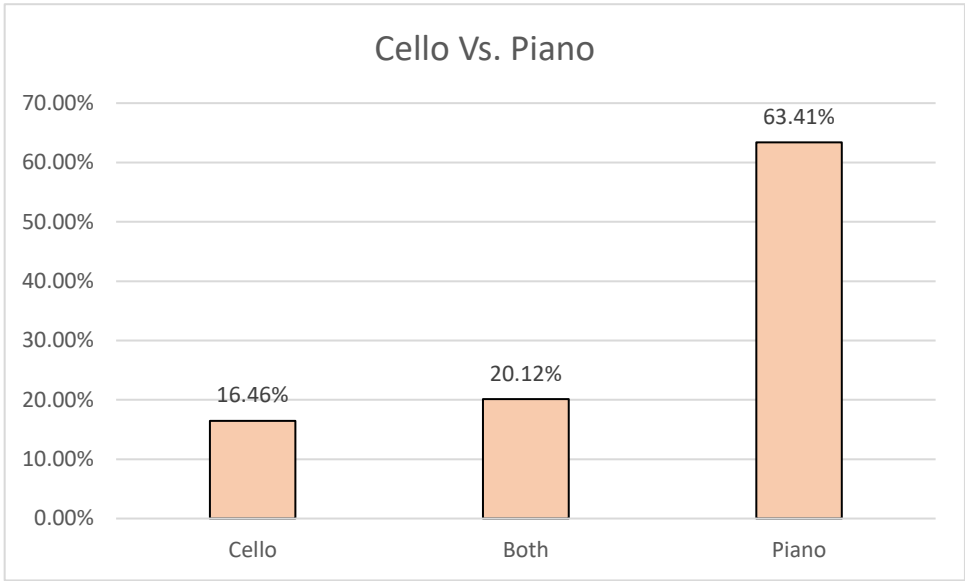
APPENDIX 5: Survey results

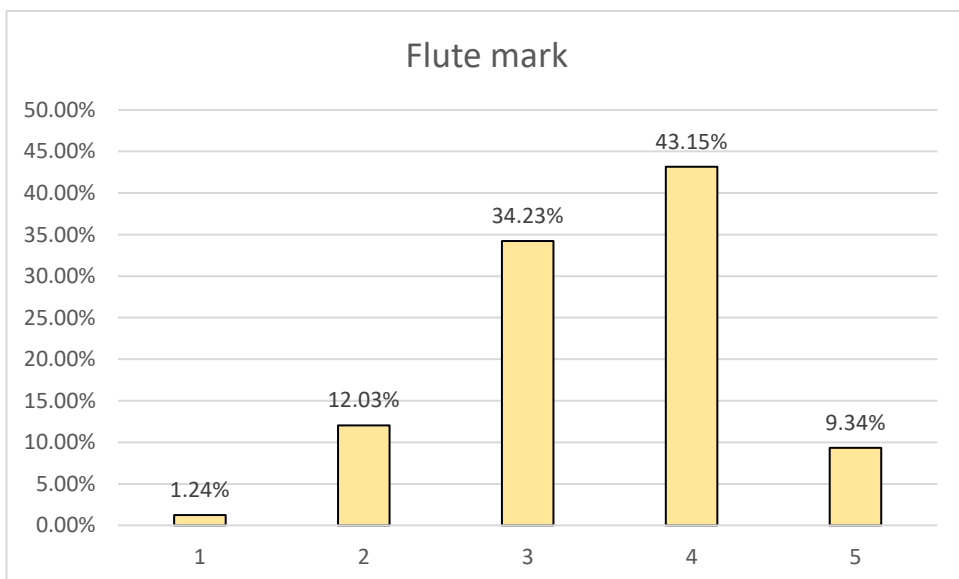
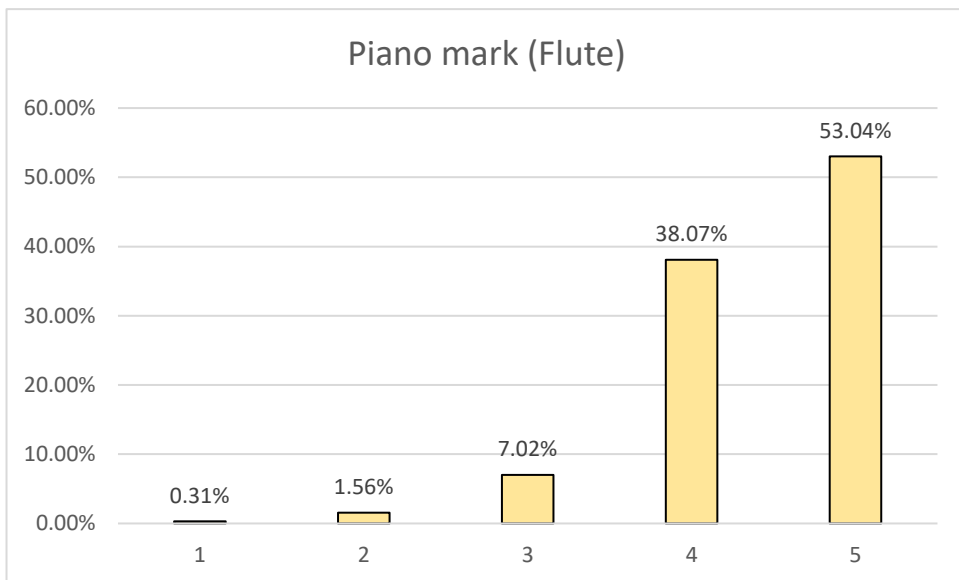
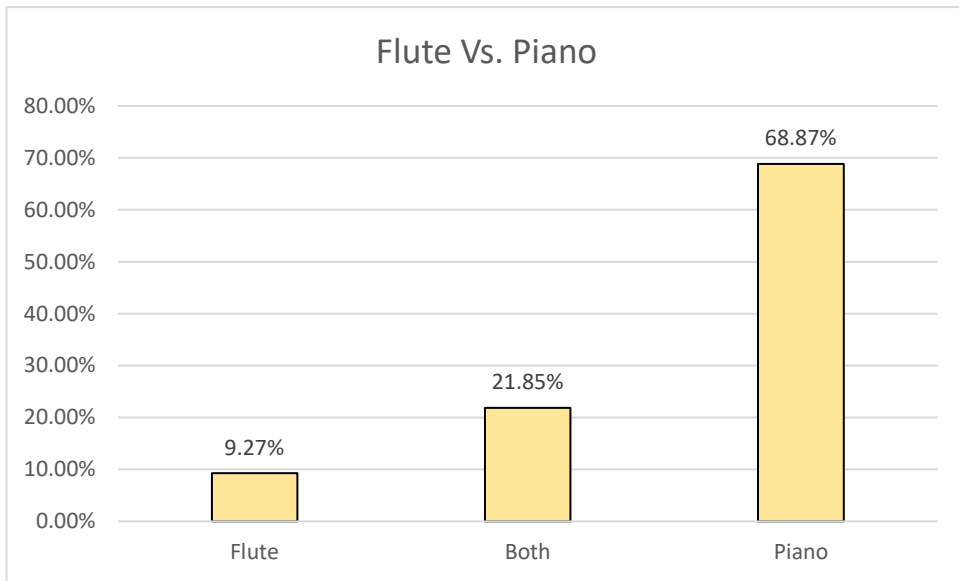












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