Motif: a digital guide to assist the use and selection of music tracks for audiovisual editing

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Abstract

The popularization of online video platforms has also increased the number of producers who, with reduced teams or composed of a single person, have an inexperienced profile in this activity. Thus, among the various specificities of the material produced, the sound issue tends to be underestimated, sometimes harming the message to be transmitted. The objective of the research was to develop a guide that would help the process of selection and use of music tracks, enhancing the audiovisual message. For the development of the digital solution, we used the methodologies of the Essential Competencies of Information Design (Simlinger, 2007) and Project E by Meurer & Szabluk (2010). As a result, we present the website Motif, with content on the use of music tracks in audiovisual material, based on emotions and musical characteristics, sensations, music track effects, soundtrack-based video editing, and a music tracks search tool, according to the listed concepts.

Keywords: Audiovisual; Video editing; Music track; Soundtrack; Website.

1. Introduction

With the growth of online video platforms and the spread and popularization of the video culture, the

number of video content creators grows every day.

In the production and analysis of audiovisual media, the verbal, visual, and sound components should be considered, and, according to their specificities, should contribute to the main objective of communicating a message in the most efficient way possible. These elements have the power to highlight and emphasize the message, or, when used inappropriately, they can generate visual, sound, and semantic noise, making it difficult to communicate and understand the content.

Among the components that generate auditory stimulation, music has the power to establish an atmosphere that exceeds the visual and verbal components, creating environments of anticipation and evoking certain feelings and emotions in the viewer.

The use of these resources presupposes intentionality and requires attention so that the atmosphere expressed by the sound environment not only corresponds to the author's intention but also enhances the conveyed premise, thus making the sound message converge with the visual and connotative messages.

In small video production environments, it is common to have a team that is reduced or composed by a single person, presenting a beginner or inexperienced profile in this activity. Thus, among the various specificities of the production of video material, the sound matter tends to be underestimated, both in terms of audio capture and editing, as well as in terms of selection and use of the music track.

As a result of observations of the video editing activity developed in the authors' workspace and due to the perceived difficulty of professionals and students in selecting and using soundtracks for video, this work aims to develop a guide to assist the selection process and the use of musical soundtracks, in order to enhance the audiovisual message, with a focus on video editors who are not in the music field.

For this, we turned to literature to list approaches on the spectator's emotions from sound influences and to categorize musical characteristics and their relationship with thematic intentions of audiovisual products, culminating in the development of a digital tool in the form of a website to guide and enable the choice of music tracks for audiovisual media.

The study is justified by the opportunity to refine processes and improve the products, in order to develop progressively better results, promoting the understanding and learning of this parameter of audiovisual production. In the activity of video production with students in a video workshop, we identified the need to develop a means by which the selection and use of soundtracks could become more assertive, in line with the communicated message.

Through the research and development of this tool, it is possible to move away from empirical practice guided by intuition and towards a scientific exercise based on defined parameters, known, and explored by science, in the form of literature in the area, and adopted by the praxis of audiovisual production.

We understand that this research and tool contributes to the development of the scientific field of audiovisual production and related areas and assists the creative and labor practice of these activities.

2. Literature Review

Audiovisual media is understood as a discourse that necessarily uses the senses of sight and hearing simultaneously, and, therefore, composed of visual (images, photographs, drawings, graphics, diagrams, etc.) and sound elements (music, voice, sound effects, etc.) in the quality of speech elements, capable of

recording, transmission and/or reproduction (Díaz & Rebollo, 2013).

Dondis (1997) points out that direct experience with visual expression, including contact with television and cinema, is always subject to individual interpretation and that the message is influenced in varying degrees of meaning and intention until it reaches the viewer. “Languages are systems invented by man to encode, store and decode information. Their structures, therefore, have a logic that visual literacy is unable to achieve”(Dondis, 1997, p.19).

Unlike other resources present in audiovisual production, sounds require a longer duration to be recognized and interpreted. In the audiovisual experience, human perception tends to focus on the narrative and on the visual resources explored on the screen, inhabiting the foreground. Sounds, on the other hand, as they do not have representational and narrative content, tend to remain in the background of perception, inhabiting the spectator's sensory background, less susceptible to active perception and rigorous judgment, and more susceptible to affective manipulation (Gorbman, 1987).

The pleasure associated with music has been studied for centuries, but a common point in the discourse of science is that music has direct access to the soul, an emotional link between composer and listener (Gorbman, 1987). The author also states that music produces two types of connection, one of identification – the subjective involvement with the film, with the feelings of the characters and her own – and the other of spectacle – in which the subject is invited to contemplate the work shown and identify with the film's audience/audience mates.

2.1 Soundtrack

In audiovisual production, sound elements can be divided into words, music, sound effects, and silence (César, 2009). Regarding these elements, Carrasco (2010) states that the term soundtrack is used widely and generally with the wrong meaning, commonly associated with music heard in movies, series, or soap operas. However, within the technical scope of the audiovisual production area, the soundtrack consists of the set of all sounds present in an audiovisual piece, divided mainly into three groups: dialogues, such as speeches and voices; sound effects or sound design, such as the sounds of objects, the environment, or people; and finally, music, specifically called a music track.

Gorbman (1987, p.14) states that "although film music undeniably possesses its own internal logic, it always bears a relationship to the film in which it appears", so that music and image have mutual implications, exerting influence and helping to give full meaning to each other. Therefore, the image should not be considered autonomous in itself, but it can be considered polysemic, in such a way that music helps to define its meaning.

Due to this mutual influence, of video on music and music on video, “image, sound effects, dialogue, and music-track are virtually inseparable during the viewing experience; they form a *combinatoire* of expression.” Gorbman (1987, p.16). The author goes on: just as two words put together in a sentence will produce a different meaning than each word separately, any music applied to a movie segment will do something, have an effect, and the viewer automatically imposes meaning on the combination of a scene and music.

Thus, selecting the track properly is part of the video creators' attributions, since whatever music is applied, the scene will seem to justify it and vice versa.

2.2 Sound and musical classifications

Despite the subjective character generally attributed to listening and musical taste, to Ramos (2008, p.179) "musical emotions seem to depend more on the cognition of the elements of the musical structure of a work than on the personal history of each one". The author worked with the basic emotions most commonly proposed in the literature (Juslin, 2000), Joy, Serenity, Sadness, Fear or Anger and the results showed that "most of the musical excerpts used triggered a single specific emotion in the listeners" (p. 97), musicians and non-musicians, however, some of these excerpts triggered more and an emotion.

The author made a relationship between emotional associations in musical excerpts, correlating emotions, temporal perception, harmonic modes, and tempos. Two structural properties were identified as modulators of the perception of specific emotions during music listening: the mode (organization of notes within a musical scale) and the tempo (number of beats per minute).

Sonnenschein (2001) presents an emotional inventory developed by Friederich Marpug, an 18th-century music critic and composer, characterizing moods and emotions according to specific rhythms, tonal progressions, and harmonies, in addition to terms linked to personality attributes (Table 1).

Table 1. Acoustic expression of emotional states, according to Friedrich Marpug (1718-1795)

Emotion	Expression
sorrow	slow, languid melody; sighing; caressing of single words with exquisite tonal material; prevailing dissonant harmony
happiness	fast movement; animated and triumphant melody; warm tone color; more consonant harmony
contentment	a more steady and tranquil melody than with happiness
fear	tumbling downward progressions, mainly in the lower register
hate	rough harmony and melody
wrath	expression of hate combined with running notes; frequent sudden changes in the bass; sharp violent movements; shrieking dissonances

Selected frequent emotions and their musical description presented by Sonnenschein (2001)

Juslin & Laukka (2004) present basic emotions and the musical characteristics most associated with them in the literature, pointing out, in detail, configurations of different musical characteristics for different emotions. However, the same characteristic can be used in more than just an emotional expression. For example, fast tempo can be used for both anger and happiness. Thus, considering musical characteristics as cues to express emotions, "each cue is neither necessary nor sufficient, but the larger the number of cues used, the more reliable the communication" (Juslin, 2001b apud Juslin & Laukka, 2004).

Bragança (2010) defends the use of synesthesia, as a figure of speech, as a resource to talk about musical perception, since sound sensations often escape a more objective definition. The use of metaphors through the association between apparently unrelated conceptual fields is linked to the practice of creative activities. The author states that synesthetic characteristics can be present throughout a musical piece, varying according to the structure and musical characteristics presented, so that sound sensations (music) awaken and transport other sensations (visual, kinetic, tactile, etc.), which can evoke an image, a poem, a personal

experience, etc. Although this form of perception is underestimated because it is associated with primitive listening, musical structures are effective when they are capable of conducting synesthetic transformations in the listener.

Bragança (2010) proposes a preliminary systematization of synesthetic categories containing visual references, density, pressure, movement, heat, and texture. For each of the sensations placed, there are at least two opposite poles, which are generally extremes of a continuum of possibilities. This systematization provides subsidies for the use of synesthetic metaphors in the description and classification of material from musical soundtracks, especially when technical descriptions are not understood by a lay public in music.

2.3 Relationship between emotions, musical characteristics, and synesthetic description

Through the categorization developed and established by the authors Juslin & Laukka (2004), Bragança (2010 and Sonnenschein (2001) it is possible to compile and establish the relationship between emotions and their respective musical characteristics. The emotions Joy/Happiness, Serenity/Tenderness, Sadness, Anger and Fear are studied more recurrently, presenting a broader description, and were listed together with their synesthetic description of sensations (Table 2):

Table 2. Relation between emotions, their respective musical characteristics, and synesthetic description

Emotion	Musical characteristics	Synesthetic description
Joy/Happiness	Fast tempo, simple and consonant harmony, animated melody, medium-high sound level, major mode, high pitch, ascending pitch, staccato articulation, fast tone attacks, smooth and fluent rhythm, bright timbre	Clear, bright, wide, cheerful, fast-paced, rising, up, energetic, light, symmetrical, directional, fast, unilinear, regular, smooth
Serenity/Tenderness	Slow tempo, consonant harmony, steady and tranquil melody, major mode, medium-low sound level, low pitch, legato articulation, slow tone attacks, soft timbre	Smooth, calm, slow, delayed, clear, thin, circular, light, regular, symmetrical, unilinear, smooth, ascending
Sadness	Slow tempo, prevailing dissonant harmony, slow and languid melody, minor mode, descending pitch, legato articulation, slow tone attacks, dull timbre	Dark, gloomy, descending, retarded, melancholy, weak, dense, constricted, heavy, calm, asymmetrical, cold, harsh
Anger	Fast tempo, minor mode, atonality, dissonance, rough melody, high sound level, descending pitch, staccato articulation, sudden rhythmic changes, sharp timbre, fast tone attacks, accents on tonally unstable notes	Dark, opaque, dense, energetic, constricted, heavy, non-directional, accelerated, descending, angular, agitated, irregular, asymmetrical, hot, rough, intricate, fast

Fear	Fast tempo, minor mode, dissonance, low sound level, rapid changes in sound level, high pitch, descending pitch, staccato articulation, jerky rhythms, soft timbre, soft tone attacks	Dark, faded, shadowy, opaque, rarefied, constricted, heavy, non-directional, accelerated, decreasing, angular, agitated, asymmetrical, cold, rough, intricate, fast, descending

The relation between emotions, musical characteristics, and their synesthetic description outlined by the authors based on Juslin & Laukka (2004), Bragança (2010 and Sonnenschein (2001).

Through the compilation of this information, it was possible to ground the development of the subsequent steps of this research, such as the selection of musical tracks according to the base emotions, the activity of music listening and classification, and the use of this data to establish filtering criteria for the music search tool proposed for the website.

3. Methods and Techniques

In order to interpret the universe of the research problem, establishing the connection between the real world, the scientific environment, and the development of solutions, we used scientific methodology, classification and research techniques, and Design methodologies and techniques.

According to the classification proposed by Gil (2019), this study

- as for the area of knowledge, it is Applied Social Sciences, Industrial Design, Visual Programming;
- in terms of nature, it is applied research, aimed at acquiring knowledge with a view to its application in a specific situation;
- as to the way of approaching the problem, it is qualitative;
- as for the objectives, it is exploratory; and
- as to the methods used, it is bibliographical with a survey.

The classification of the research as exploratory led to the use of bibliographic methods, employing indirect documentation techniques to support the theoretical framework, through bibliographic research; and with surveys, with semi-structured interview techniques and an activity of music listening and classification (Figure 1), with experts and people with practical experience in the areas (Facca, 2011; Gil, 2019), in addition to usability tests of the developed tool, according to Krug (2014).

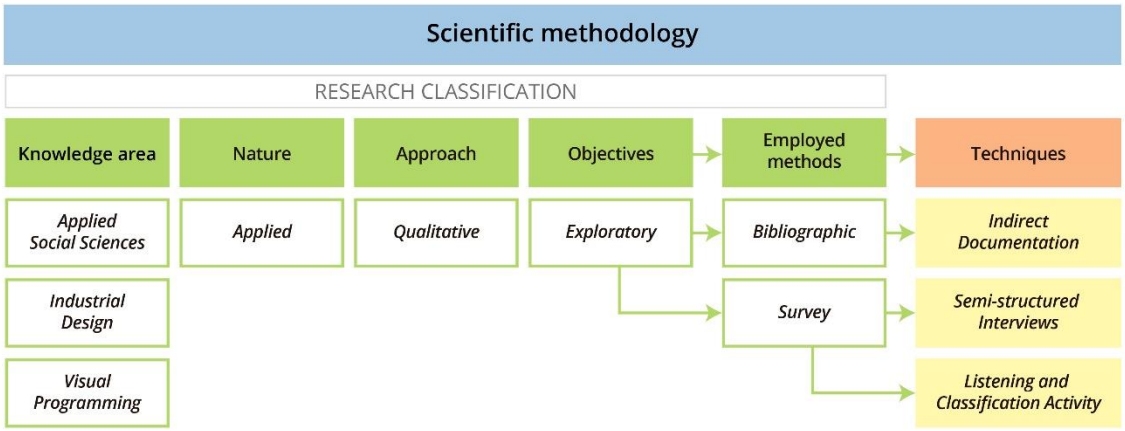

Figure 1. The research's classification in the scientific methodology points out the adequate methods and techniques to approach the study, according to Facca (2011) and Gil (2019).

Given the qualitative approach of the research, we used a non-probabilistic sampling, self-generated and by convenience, applied to three different stages of the research: semi-structured interviews, card sorting, and an activity of music listening and classification (Figure 2).

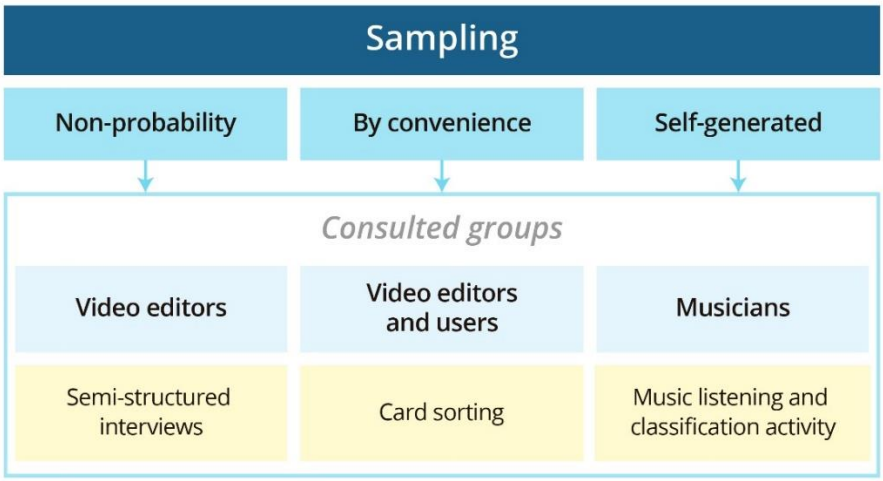

Figure 2. The qualitative sampling method was applied to select three different groups to apply distinct research techniques.

For the semi-structured interview, we surveyed professional video editors, self-employed and/or working in micro-enterprises (Brasil, 2006; Bueno, 2017; Sbcoaching, 2018). Ten open questions were pre-established about the practice of the research target activity, as stated by Marconi & Lakatos (2018).
For the card sorting, we used the online tool Optimal Sort, and invited video editors and potential users of the system, to structure the content of the digital tool in the most appropriate way, based on the mental model of information and concepts in the user's view (Cooper et al., 2014; Santa Rosa & Moraes, 2012).
For the activity of music listening and classification, we counted on the participation of Music professionals to analyze a selection of ten musical tracks taken from the most mentioned source in the semi-structured interviews. The activity was based on the Relationship between emotions, musical characteristics, and synesthetic description, and musical instruments, in order to collaborate with the validation of the listed

parameters.

Due to the Covid-19 pandemic and the imposed health and social distancing measures, the activities of card sorting, music listening and classification, and usability tests were adapted to a remote modality, with more participants, with no harm to the collected information.

3.1 Project methodology

To guide the development of the digital guide to aid the selection process and the use of soundtracks, we chose two methodologies aimed at the development of user-friendly digital products, with an emphasis on the development of information and user experience: Core Competencies in Information Design Design (Simlinger, 2007), used in its early stages as a basis for understanding the type of information, the user and the environment; and Project E: Design methodology for the development of digital-virtual products, by Meurer & Szabluk (2010), used as the basis for the design and development stages of the tool.

Simlinger's (2007) methodology, according to the author and to Freitas, Coutinho & Waechter (2013) is divided into six steps: a) Understanding a given subject matter and its value for a given user; b) Understanding the users/addressees of the information and applying methodical competence; c) Making a proposal or Strategy: Based on steps one and two, propose a strategy that outlines the work to be done or the result to be achieved; d) Designing the information or Project: Define, plan and format the content of the message and the environments in which it is presented; e) Evaluating the effectiveness of the designed information: Determine whether the information products produce the desired effect, in order to ensure that the task-related knowledge transfer objective is achieved; f) Refining and implementing the information: Based on insights gained through testing, optimize the design for the content.

To guide the stages of product development, we used the Project E methodology supplementally, aimed at the development of digital-virtual products, proposed by Meurer and Szabluk (2010), which is based on user-centered design and brings together concepts, definitions, methods, and processes of renowned authors in design, but structured around The Elements of User Experience, by Garrett (2003).

As part of the steps of evaluation and refinement of the digital tool, we carried out a task usability test, according to Krug (2014), in which users are asked to perform important tasks in the digital tool. While performing the tasks, users narrated their actions and thoughts about the interface and had their screen recorded for further analysis, generating a list of observations and implementations.

4. Data collection and analysis

As the execution of the initial stages of the design methodologies, which consist of understanding the research object, the user, and the initial context of the project, we used a bibliographic survey to build the Theoretical Framework (Facca, 2011; Gil, 2019), and to conducting semi-structured interviews and content analysis, according to Santiago (2017) and Antunes (2019).

The information collected in the interviews allowed for a more in-depth look at the music track matter in video production, from the user's point of view, and provided information for the analysis of similar solutions and for the activity of music listening and classification.

Based on semi-structured interviews, we outlined

• a profile picture of the target audience;
• the main difficulties found in the activity of choosing and using music tracks;
• the desirable features on a music track;
• the view on the role of the soundtrack in the audiovisual media and the correspondence observed with the literature;
• suggested solutions;
• the main music banks used;
• the characterization of the audiovisual production process and stages in which the use and choice of musical tracks fit;
• the most recurrent feelings and ideas in the material they produce;
• and, above all, the user's perspective on the issue of the use and selection of video music.

From the interviews, we identified the main platforms and channels of music track banks accessed by users and we compared their strengths and weaknesses in terms of features, visual resources, instructions, categories, search filters, track player, language, gratuity, and main attributes.
To apply the card sorting technique, we created 5 categories and 19 cards, based on the theoretical framework, interviews, and similar analysis. Through a hybrid card sorting, with 16 participants, video editors and potential users, we outlined the initial structure of the website and the organization of the content of the digital tool, as shown in Figure 3.

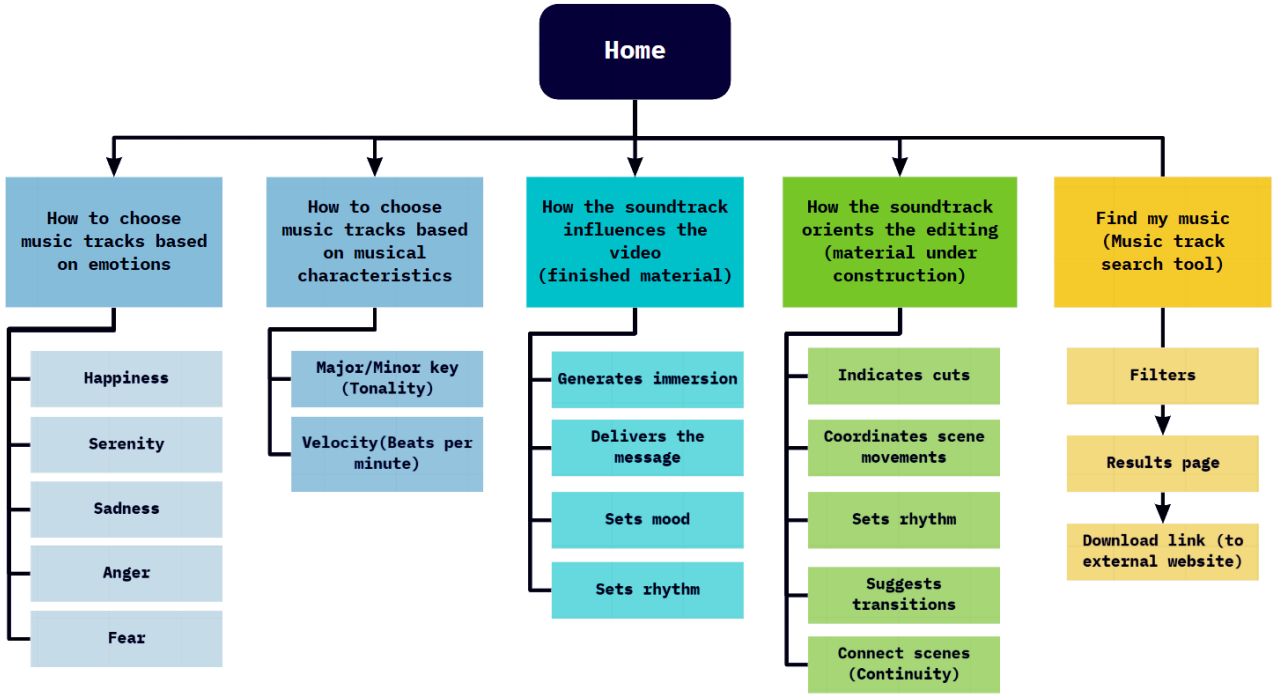

Figure 3. Initial website's structure outlined through card sorting

4.1 Music track classification

For the activity of music listening and classification, we selected an excerpt of ten tracks from the most mentioned free search source by the interviewees, the AudioLibrary Channel, on the YouTube platform.

The ten musical tracks, selected according to the basic emotions most commonly proposed in the literature Juslin (2000), were submitted to the analysis of thirteen musicians, through the activity of listening and classification. Each musician evaluated and classified five tracks according to the presence of certain (1) musical characteristics, (2) basic emotions, (3) sensations, as shown in Table 1 of this research, in addition to identifying musical instruments used.

From the compilation and organization of the data, we generated a table with information for each music track, containing the basic emotions, musical characteristics, sensations, and musical instruments (Figure 4).

Track 7: Ordinary Days – Tokyo Music Walker

Emotion	Average	Musical Characteristics	Sum	Sensations	Sum	Instruments	Sum
Serenity	4,29	Ascending pitch	7	Symmetrical	7	Piano	6
Happiness	3,14	Smooth and fluent rhythm	7	Lightweight	6	Electric bass	6
Sadness	0,14	Stable and calm melody	6	Directional	6	Electronic drums	5
Fear	0,14	Major mode	6	Claro	6	Percussion	5
Anger	0	Medium tempo	6	Calm	6	Clean guitar	4
		Bright timbre	5	Increasing	5	Synths	3
Maximum value: 5		Slow tone attacks	5	Regular	5	Distorted guitar	3
Minimum value: 0		Legato articulation	5	Smooth	5	Strings	3
		High pitch	5	Cheerful	4	Sound effects	3
		Consonance	5	Rises	3	Acoustic drums	2
		Soft timbre	5	Angular	3	Meia-lua	1
		Simple harmony	4	Hot	3	Flutes	1
		Medium-low sound level	4	Bright	3	Acoustic guitar	1
		Descending pitch	4	Descending	3		
		Staccato articulation	3	Weak (No power)	2		
		Predominantly consonant harmony	3	Linear	2		
		Low pitch	3	Spacious	2		
		Slow tone attacks	2	Unilinear	1		
		Medium-high sound level	2	Thin	1		
		Dissonance	2	Energetic	1		
		Complex harmony	2	Non-directional	1		
		Slow tempo	1	Circular	1		
		Exciting melody	1				
		Predominantly dissonant harmony	1				
		Slow and languid melody	1				
		Maximum value: 7					
		Minimum value: 1					

Figure 4. Classification of selected music tracks as a result of the activity of music listening and classification made with musicians, according to Emotions, Musical characteristics, Sensations, and Instruments.

To help visualize the information, we sorted the data in the table in descending order, with the characteristics most pointed out by the musicians at the top of the table and marked in a darker shade of green. The classification generated a database with information from each track, considering the two emotions with the highest average and sum of sensations, characteristics, and musical instruments up to a limit of three points.

5. Results

The research results were built progressively and cumulatively, so that one stage provided subsidies for the following stages and for the development of the guide to assist the use and selection of music tracks in audiovisual material, in the form of a website.

The website's content was based on literature, especially addressing the relationship between emotions, musical characteristics, and synesthetic description of sensations (Table 2), the effects of the musical track on the video, and the use of music as a basis for video editing. Each of these concepts was organized into sections and subsections, according to the user's mental model, provided by the structure outlined through the card sorting technique. For the search tool, we used the selected music tracks and the database generated through the activity of music listening and classification.

5.1 Website

Based on the previous steps and on the requirements and parameters established for the project, we proceeded to layout studies and development of the graphic interface in dark mode in low and medium fidelity wireframes and applying colors, texts and images, resulting in the initial website model (Figure 5).

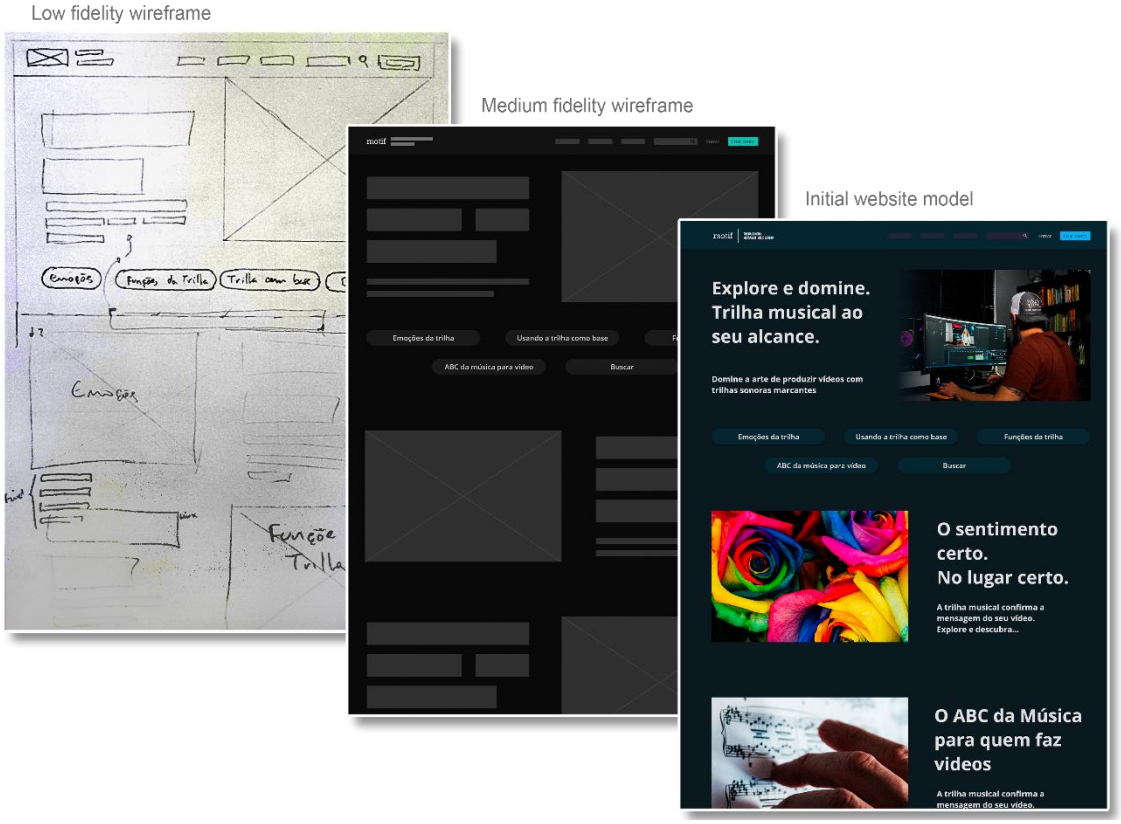

Figure 5. Website's development using low and medium fidelity wireframes up to the initial model

For the digital product development, we used the software Adobe XD, focused on experience design for websites and digital applications. However, throughout the entire visual and functional development of the website, we resorted to repeating the steps of composing low fidelity wireframes on paper, medium fidelity wireframes in the software, followed by tests and applications in the digital model (Figures 6 and 7).

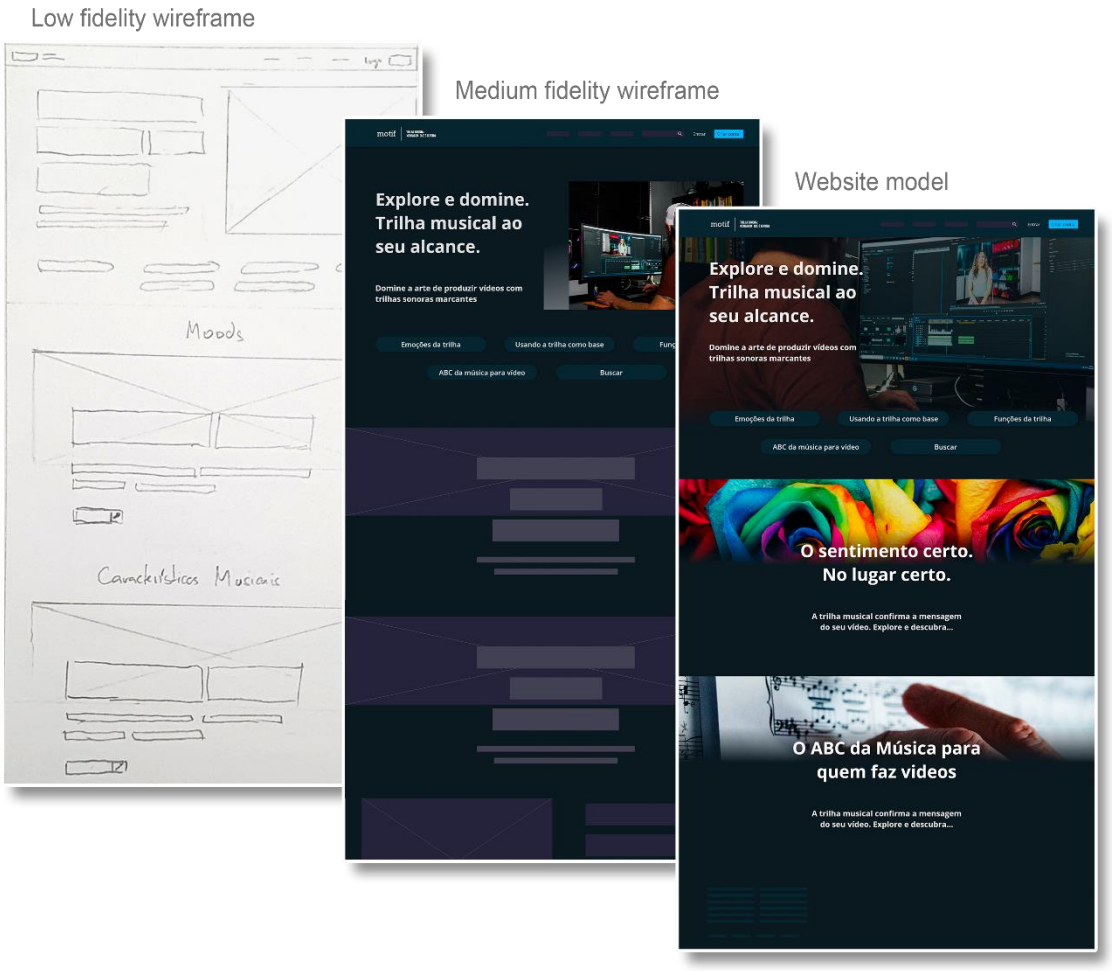

Figure 6. Implementing homepage modifications

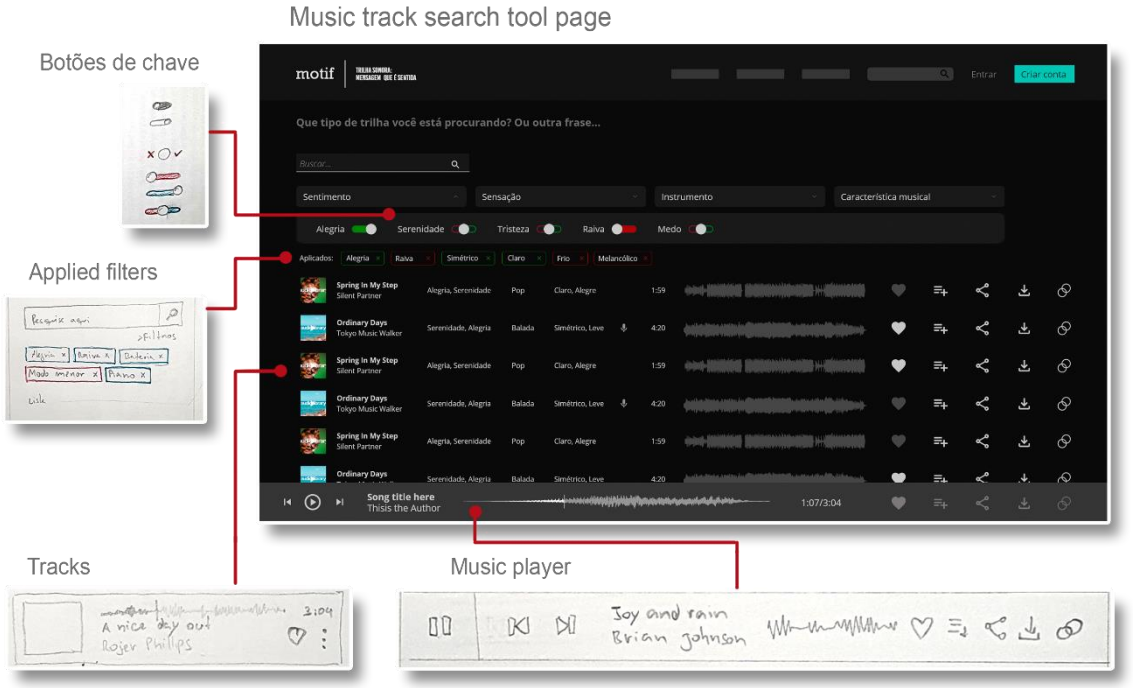

Figure 7. Process of development of the search page for music tracks, with low fidelity wireframes in detail and page model at the center.

Based on the visual pattern built for the homepage, we developed the visuals of the other pages, as well as the construction of global and local navigation elements, according to Krug (2014), and the content for each page (Figure 8).

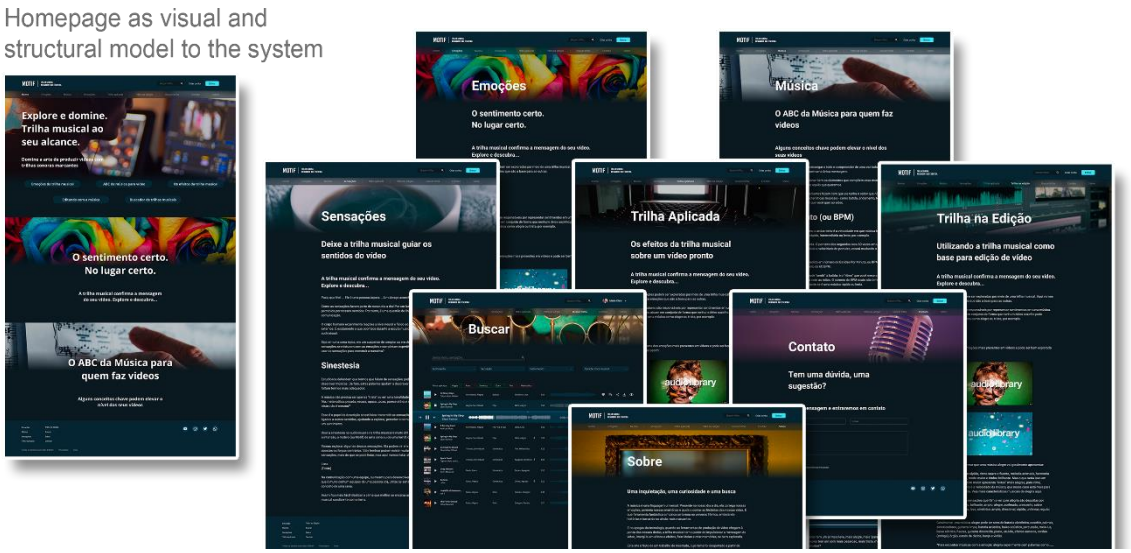

Figure 8. All website pages are modeled after the homepage's visual and structural setup.

5.2 Usability test results

As part of the methodological steps entitled Evaluating the effectiveness of the designed information (Simlinger, 2007; Freitas, Coutinho & Waechter, 2013) and Execution (Meurer & Szabluk, 2010), we resorted to task usability tests with users (Krug, 2014), with a pilot test, followed by four usability tests: two with potential users and two with usability professionals. The participants had their screens recorded while performing the tasks and simultaneously narrated their activity, thoughts and doubts.

Through notes, observations, and the researcher's perceptions on the behavior of users when interacting with the website during the execution of the activity, we generated a list of recommendations for adjustments and modifications, the most important being linked to global (Figure 9 and 10) and local navigation (Figure 11), information hierarchy, highlight to the track search tool (Figure 9) and usability (Figure 12 and 13), maintaining the website's visual unity.

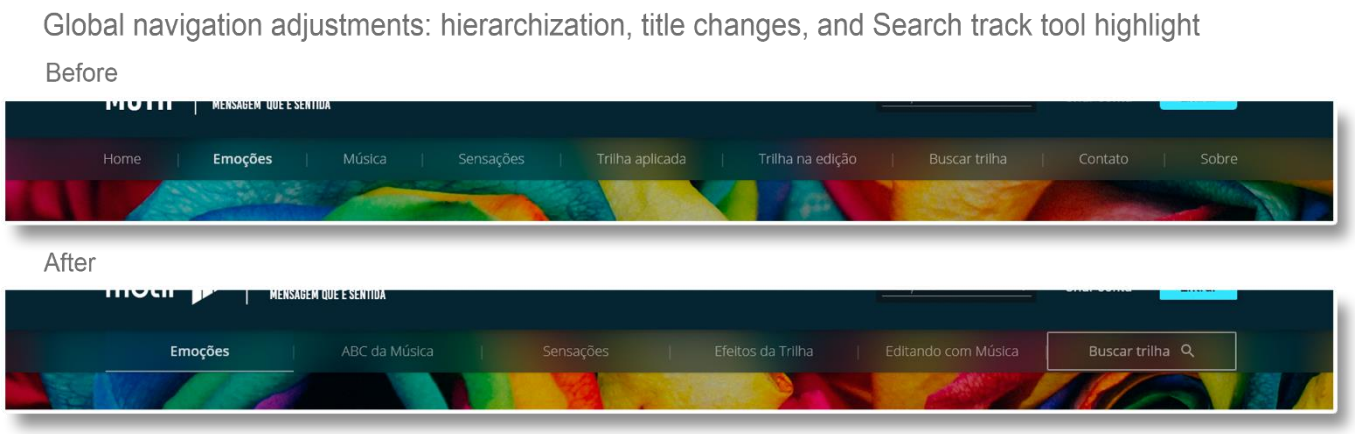

Figure 9. Adjustments to the global navigation, eliminating less important subsections, changing their title to enhance comprehension, and highlighting the Search track tool

We highlight the change of section titles to clarify the content information, from “Applied Track” to “Score Effects” and from “Score in Editing” to “Editing with Music” (Figure 9), as a result of the usability tests.

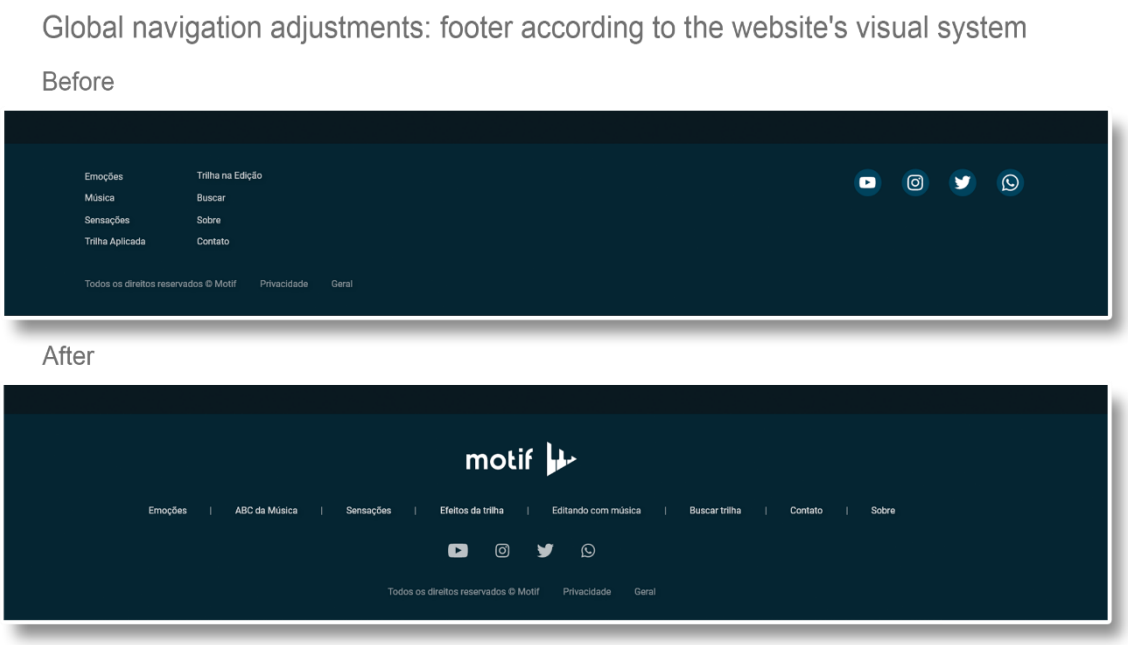

Figure 10. Adjustments to the footer as part of the global navigation as well as applying the website’s visual style.

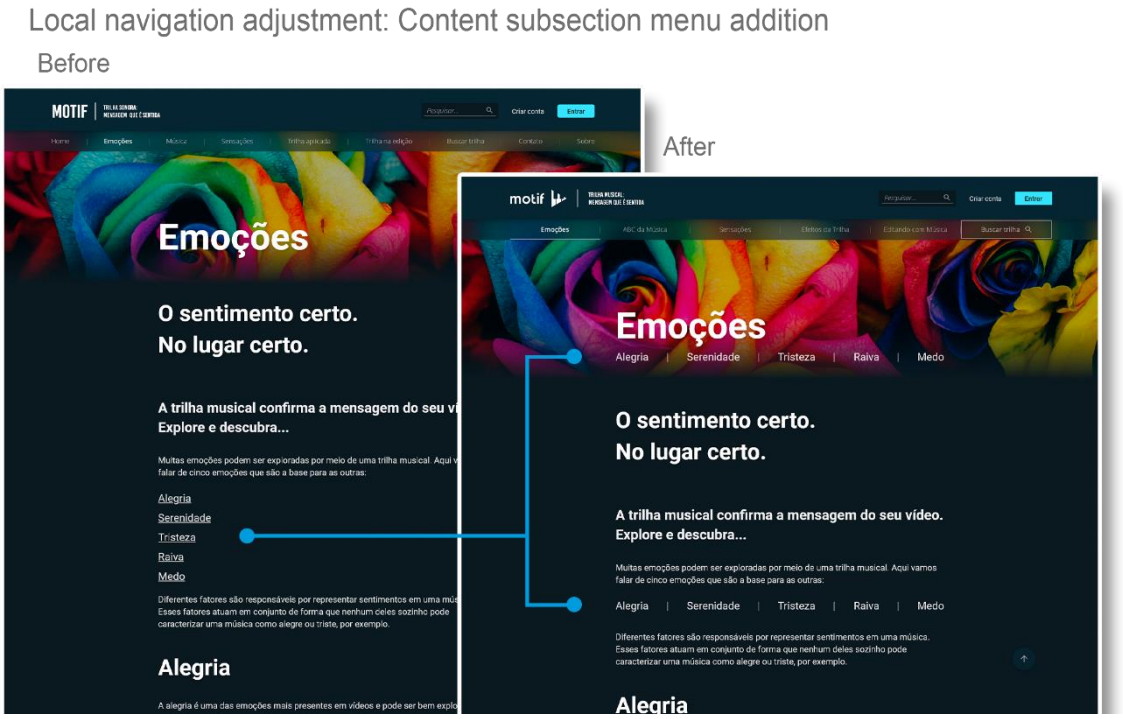

Figure 11. Adjustments to the local navigation, changing the clickable content list from horizontal to vertical and placing it below the section title and also in text to facilitate access to different parts of the page.

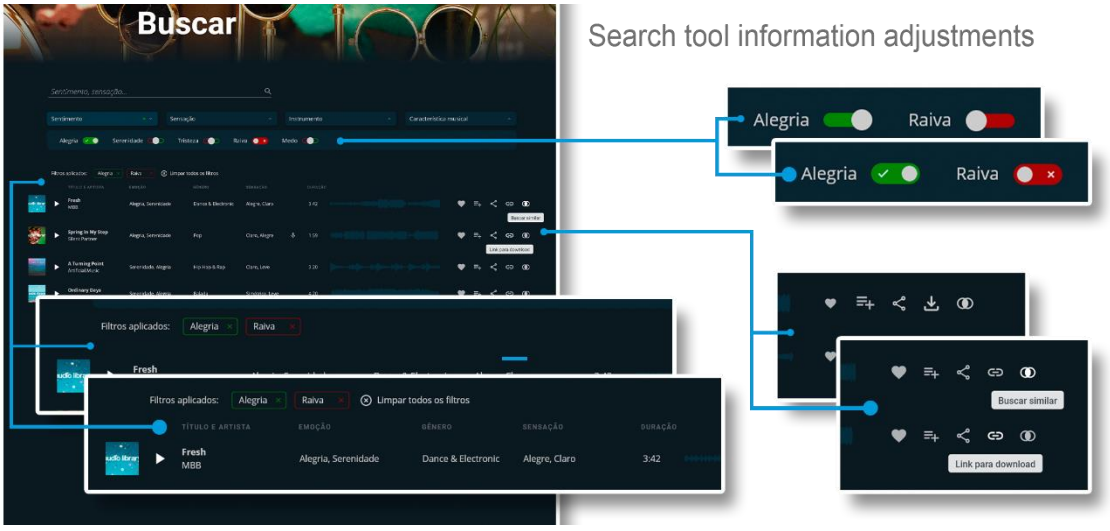

Figure 12. Information adjustments to improve the usability on the search page, reinforcing and clarifying meaning.

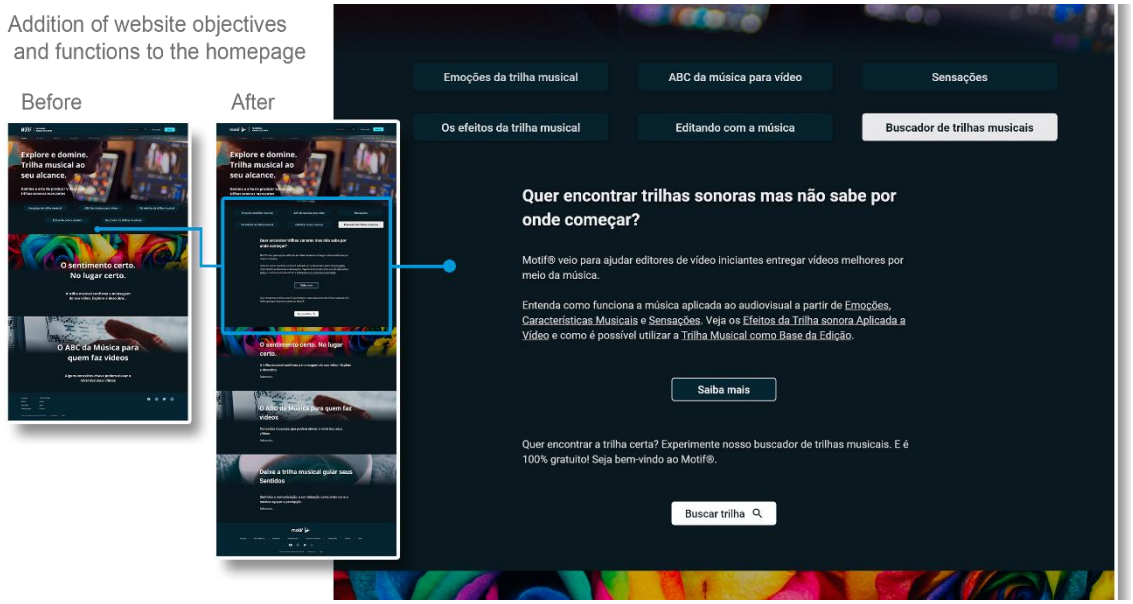

Figure 13. Website's objectives and features added to the homepage to inform the user where to go next

Along with the results of the usability tests, which generated adjustments and modifications, we added the Motif logo, complementing the visual and formal identity of the website.

5.3 Motif brand

In order to identify the service and the website, we developed a brand from the name Motif, which means theme, an intention, a musical and connotative motif. This word with a musical sense derives from the technique introduced by the opera composer Richard Wagner (1813-1883), called *leitmotif*, which translates to a leading motive. Wagner defended the connection of all forms of art in a show around a central concept, a technique absorbed and perfected by cinema (Sobreira & Guerra, 2015).
As a visual representation of the connection between music and video in the current context, we used the triangular shape of a play button containing the piano keys, meaning video music, a musical score in the audiovisual context. The brand is presented in its main horizontal signature in color (Figure 14).

motif

Figure 14. Motif logo to identify the website and the service

At the top of the website, the logo is presented with the slogan "Music track: a message that is felt" (Figure 15), pointing out the theme addressed on the website.

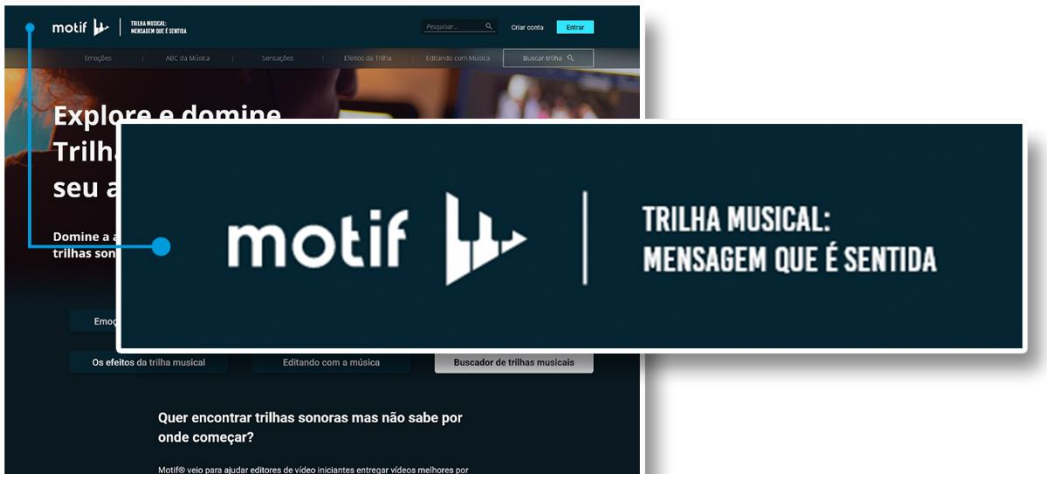

Figure 15. Motif logo and slogan applied to the website's homepage: "Music track: a message that is felt".

6. Conclusions

The relationship built between emotions, corresponding musical characteristics, and the synesthetic description of sensations underlies the composition of content and instructions on the selection and use of video music tracks, aiming to meet the communicational objectives of audiovisual pieces and to the maturation of the production practice of video.

Based on the preliminary research, the application of the methodology and research techniques, it became possible to achieve the objective of developing a guide to assist the process of selection and use of music tracks, materialized in the form of the Motif website, in order to leverage the audiovisual message, especially for video editors who are lay in the music field.

The study is relevant, especially given the considerable increase in the use of audiovisual media over the past few years, with the evolution of media production and transmission and the growing access to technology. The study becomes even more expressive given the significant increase in the use of audiovisual media during the Covid-19 pandemic and the consequent need for isolation, due to safety and health matter.

Given the abundance of audiovisual products, it becomes even more important to search for scientifically consolidated information and knowledge that is freely and abundantly available, especially for beginners in the activity of video editing. This makes it possible to achieve a greater level of refinement in the audiovisual media, greater competitiveness between video products, greater audience reach and clearer message communication.

As it is an issue little explored from a scientific perspective, the research expands the area of knowledge about the audiovisual activity involving musical soundtrack, emotions, musical characteristics, and sensations, representing a content with transformative potential.

7. References

ANTUNES, Jeferson. **Análise de conteúdo na PRÁTICA.** . [S.l: s.n.]. Disponível em: <https://www.youtube.com/watch?v=o5x-ewBqoRY>. , 2019

BRAGANÇA, Guilherme Francisco Furtado. Parâmetros para o estudo da sinestesia na música. **Per Musi**, n. 21, p. 80–89, 2010.

BRASIL. **Lei Complementar No 123, de 14 de Dezembro de 2006.** Disponível em: <http://www.planalto.gov.br/ccivil_03/Leis/LCP/Lcp123.htm>. Acesso em: 3 set. 2019.

BUENO, Jefferson Reis. **Qual a receita bruta e o número de empregados para MEI, ME e EPP?** Disponível em: <https://blog.sebrae-sc.com.br/numero-de-empregados-receita-bruta-para-mei-me-epp/amp/>. Acesso em: 3 set. 2019.

CARRASCO, Ney. Trilhas: o som e a música no cinema. **ComCiência**, v. s/v, n. 116, p. 0–0, 2010. Disponível em: <http://comciencia.scielo.br/pdf/cci/n116/09.pdf>. Acesso em: 3 jun. 2019.

CÉSAR, Cyro. **Como falar no rádio:** prática de locução AM e FM. São Paulo: Summus, 2009.

COOPER, Alan, et al. **About Face 4:** The Essentials of Interaction Design. 4. ed. Indianapolis: y John Wiley & Sons, 2014.

DÍAZ, Julio Montero; REBOLLO, María Antonia Paz. Historia audiovisual para una sociedad audiovisual. **Historia Critica**, p. 159–183, 2013. Disponível em: <http://www.scielo.org.co/pdf/rhc/n49/n49a08.pdf>. Acesso em: 18 ago. 2021.

DONDIS, Dontes A. **A Sintaxe da Linguagem Visual** - Tradução Jefferson Luiz Camargo. São Paulo: Martins Fontes, 1997.

FACCA, Claudia Alquezar. **O designer como pesquisador:** uma abordagem metodológica da pesquisa aplicada ao Design de Produtos. São Paulo: Blucher Acadêmico, 2011.

FREITAS, Ranielder Fábio De; COUTINHO, Solange Galvão; WAECHTER, Hans da Nóbrega. Análise de Metodologias em Design: a informação tratada por diferentes olhares. **Estudos em Design**, v. 21, n. 1, p. 1–15, 2013. Disponível em: <https://estudosemdesign.emnuvens.com.br/design/article/view/111/108>.

GARRETT, Jesse James. **The elements of user experience:** user-centered design for the web. New York: News Riders, 2003.

GIL, Antonio Carlos. **Como elaborar projetos de pesquisa**. 6. ed. São Paulo: Atlas, 2019.

GORBMAN, Claudia. **Unheard Melodies:** Narrative Film Music. [S.l: s.n.], 1987. v. 91.

JUSLIN, Patrik N. Cue utilization in communication of emotion in music performance: Relating performance to perception. **Journal of Experimental Psychology:** Human Perception and Performance, v. 26, n. 6, p. 1797–1812, 2000. Disponível em: <http://doi.apa.org/getdoi.cfm?doi=10.1037/0096-1523.26.6.1797>. Acesso em: 2 out. 2019.

JUSLIN, Patrik N.; LAUKKA, Petri. Expression, Perception, and Induction of Musical Emotions: A Review and a Questionnaire Study of Everyday Listening. **Journal of New Music Research**, v. 33, n. 3, p. 217–238, 2004.

KRUG, Steve. **Não me faça pensar:** atualizado. Rio de Janeiro: Alta Books, 2014.

MARCONI, Marina de Andrade; LAKATOS, Eva Maria. **Técnicas de pesquisa.** 8. ed. São Paulo: Atlas, 2018.

MEURER, Heli; SZABLUK, Daniela. Projeto E: aspectos metodológicos para o desenvolvimento de projetos dígito-virtuais. **Revista Brasileira de Ergonomia,** v. 5, n. 2, p. 1–9, 2010. Disponível em: <http://www.abergo.org.br/revista/index.php/ae/article/view/85/82>.

RAMOS, Danilo. **Fatores emocionais durante uma escuta musical afetam a percepção temporal de músicos e não músicos?** 2008. Universidade de São Paulo, 2008. Disponível em: <http://www.teses.usp.br/teses/disponiveis/59/59137/tde-08102008-013413/en.php>.

SANTA ROSA, J. G.; MORAES, A. **Avaliação e projeto no design de interfaces.** Teresópolis, Rio de Janeiro: 2AB Editora, 2012.

SANTIAGO, Glauber. **Como analisar dados de entrevistas.** . [S.l: s.n.]. Disponível em: <https://www.youtube.com/watch?v=Ga18ag7PgoQ>. , 2017

SBCOACHING. **Profissional Liberal ou Autônomo:** Guia Completo. Disponível em: <https://www.sbcoaching.com.br/blog/profissional-liberal/>.

SIMLINGER, Peter. **idX Core Competencies:** What information designers know and can do. Viena: IIID, 2007.

SOBREIRA, Rogério; GUERRA, Anselmo. Música & cena. **Revista Arte da Cena,** v. 1, n. 2, p. 51–66, 2015. Disponível em: <https://www.revistas.ufg.br/artce/article/view/34769/18367>.

SONNENSCHEIN, David. **Sound design:** The expressive power of music, voice, and sound effects in cinema. Studio City: Michael Wise Productions, 2001.