



The Influence of Music Psychology on the Consistency of Mood in Movies: A Review of Historical Works and Empirical Research

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ABSTRACT

This study takes music and its corresponding psychological effects in the historical movie works as the research object, sorts out the internal connection between the musical form factors of the movie and the audience's psychology, and then analyzes the tense psychological emotions and their musical psychological aspects through movie examples, explores the sound factors and their psychological contrast effects, and finally reveals the impact of changes in proper melody on psychological outcomes. Research has found that the loudness of sound is closely related to emotional fluctuations, as well as the psychological responses brought by different types of music in dynamic and static movie scenes. When creating the sound of movie and television works, unique loudness designs for language and sound effects often bring unexpected results. The sounds in movies are all compound sounds, different from the direct physiological stimulation of pure tones on the auditory system. The tone cognition of compound sounds not only includes physiological reactions but also brings specific psychological effects. The psychological perception brought about by changes in sound frequency is different from the psychological impacts of loudness, and the psychological outcomes related to frequency are mainly attached to music and musicalized sound in creation. The rhythm, frequency, and emphasis of sound can more effectively and accurately guide the audience to realize the spatiotemporal transformation in the movie, providing them with a better viewing experience. The connection between "real" and "nonreal" scenes in historical movies usually involves high-frequency instruments and significant changes in the rhythm of the music. These self-explanatory psychological suggestive methods, combined with symbolic music, can create a specific "hypnotic" effect on the whole, bringing a combination of natural and virtual psychological effects to the audience.

Keywords: Psychology; Music Effect; Movie Mood; History Movie and Television; Example Analysis.

INTRODUCTION

The development of movie music has a history of over a hundred years. From the initial live piano music for movies to today's magnificent movie music, movie music has ushered in the most glorious era. It is no longer simply about achieving a balance between hearing and vision at the beginning (Abraham, Bremser, Carreno, Crowley-Cyr, & Moreno, 2021). With the progress of the times and the development of technology, music has become an inseparable part of movies (Angel-Alvarado, Quiroga-Fuentes, & Gárate-González, 2022). Music helps deepen the theme connotation of movies, Enriching the character image, promoting the plot development, and foreshadowing the plot (Ajmani & Kumar, 2022), it also brings unprecedented unity to both auditory and visual senses. In sound design, it is necessary to fully consider the stimulating and inducing effects of music on human emotions (An, Sung, & Yoon, 2022). If one wants to provide an immersive experience for viewers in movie and television media and electronic games, relying solely on visual experience is not enough. Good music compatible with video information can help enhance the core function of movie and television media and electronic games - leisure and entertainment (Bakerjian, Bettega, Cachu, Azzis, & Taylor, 2020).

As an essential component of audiovisual media, movie sound simulates human auditory perception experience through the combination of language, music, and sound effects, bringing depth and breadth to various objects in the movie in time and space (Biasutti, Antonini Philippe, & Schiavio, 2021), promoting the development of the story, depicting character images, and expressing the theme of the movie. A good voice creator not only completes the linkage between visual and auditory factors in the movie but also applies psychological knowledge to the creation (Borenstein, Hedges, Higgins, & Rothstein, 2021). By reasonably controlling physical parameters such as loudness, frequency, timbre, and spatiotemporal relationships of the sound, it strengthens the emotional expression of the movie and affects the audience's psychological perception (Cardona, Rodriguez-Fornells, Nye, Rifà-Ros, & Ferreri, 2020). The greatest strength of music lies in its ability to summarize the most inner psychological experiences and subtle and rich emotional states of humanity. In a movie, sometimes a scene portrays a character's emotions: either joy, sorrow, tension, panic, or lightness, and so on. Film music is best at revealing the inner world of characters and expressing the complex inner emotions of characters that cannot be intuitively seen on the screen. The main purpose of using music in movies is to enhance the emotional color of the film, thereby promoting the emotional fit between the entire film and the audience. There are many forms of music that play this role in the film: it can be in picture music or out of picture music; It can be a piece of music or a song (Cartagena, 2021). As a combination of audiovisual art, historical movies, and television can use background music that matches the theme of historical movies and television in post-production to enhance the atmosphere, convey emotions (Carlson et al., 2021), and express meaning. Dealing with the relationship between sound and visuals in historical literature and historical movies can enrich the expressive power of historical movies and build a unique style of documentary aesthetics (Cheah, Nitzl, Roldan, Cepeda-Carrion, & Gudergan, 2021).

This study takes music, and its corresponding psychological effects in the historical movie works as the research object, sorts out the internal connection between movie music form factors and audience psychology, and then analyzes tense psychological emotions and their musical, and psychological factors through movie examples. Then, through movie examples, from three perspectives of the psychoacoustic response mechanism of music, the sound factors and their psychological contrast effects are analyzed. Finally, several classic historical movies of different types were used to analyze the impact of changes in proper melody on psychological effects, as well as the psychological responses brought by different music types in dynamic and static movie scenes. This study can provide guidance and reference for the research on the impact mechanism of music psychology on movie mood.

THE PSYCHOLOGICAL EFFECTS OF MUSIC

The Internal Relationship between Factors of Music Form and Psychology

Music emotion refers to the emotional response induced by individuals under music stimulation. The consistency model of music cues points out that the internal representation of music symbols in the listener must be consistent with the internal representation of music symbols in the creator in order to achieve effective communication between the listener and music. Human emotions have bipolar characteristics, such as the increase and decrease of emotional motivation, the excitement and calmness of emotional excitement, and the strength of emotional intensity (Cowen, Fang, Sauter, & Keltner, 2020). This polarity has a clear corresponding relationship with the contradiction of various musical factors, such as the height of the rise, the harmony and dissonance of the intervals, the stability and instability of the song, the length and rhythm of the pitch and the speed, and the high and low loudness (Damayanti, Yahya, Yean, Maasir, & Abdullah, 2022). The mechanism of the influence of musical form factors on psychology is shown in [Figure 1](#). The stimulation effect of music on positive emotions is complementary to the leisure and relaxation effects of movie and television media and electronic games. Not only upbeat emotional music, but even negative emotional music can help stimulate listeners' various emotions and emotional experiences, thereby achieving the effect of venting negative emotions (Daubney & Fautley, 2021). This effect of music, along with different visual violence factors in movie and television media and electronic games, allows the experimenter to vent real-life boredom and achieve a calming effect (Das & Satpathy, 2021).

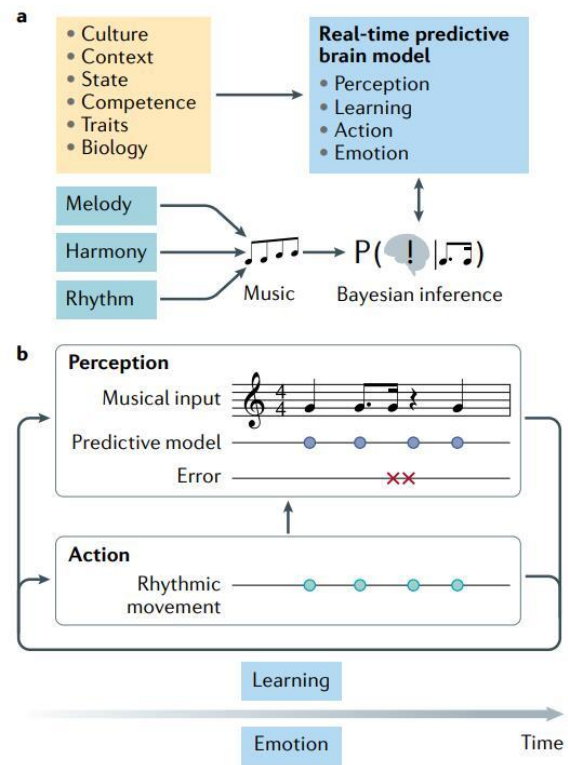


Figure 1. The Mechanism of the Influence of Music Form Factors on Psychology

Nervousness and Its Expression in Music

Psychological Level of Expectation

The occurrence of music emotions as a whole involves the characteristics of clues generated during the music creation process and the characteristics of music during performance, The characteristics of the listener and the context in which they listen to music are the four major factors. These four factors and their interactions make music emotions appear complex and difficult to control. One of the manifestations of tension and its expression in music is a psychological sense of anticipation. From a psychological perspective, a sense of expectation refers to a physiological drive toward a goal. When a need is unmet, the movement towards inner inclination will increase, causing psychological imbalance and causing an increase in tension (Davies, Shurdington, Murray, Slater, & Pearson, 2021). Expectation is one of the standard techniques in music creation to improve and maintain pressure. Expectations such as seeking the opposite sex. It refers to the expectation of change caused by prolonged retention of stimuli of the exact nature (De Witte, Spruit, van Hooren, Moonen, & Stams, 2020). Meeting the needs of the opposite sex can lead to a decrease in tension while hindering the satisfaction of the opposite sex's needs can lead to an increase in pressure. Music that conforms to psychological inertia gives people a natural and smooth feeling, while conversely, it makes people feel sudden and tense (Doubova et al., 2020). For example, in situations where interval congruence is similar, jumping in at large intervals is more stressful than progressing at small intervals because it does not meet the requirements of customary expectations. The relationship between musical effects and psychological emotions is shown in Figure 2.

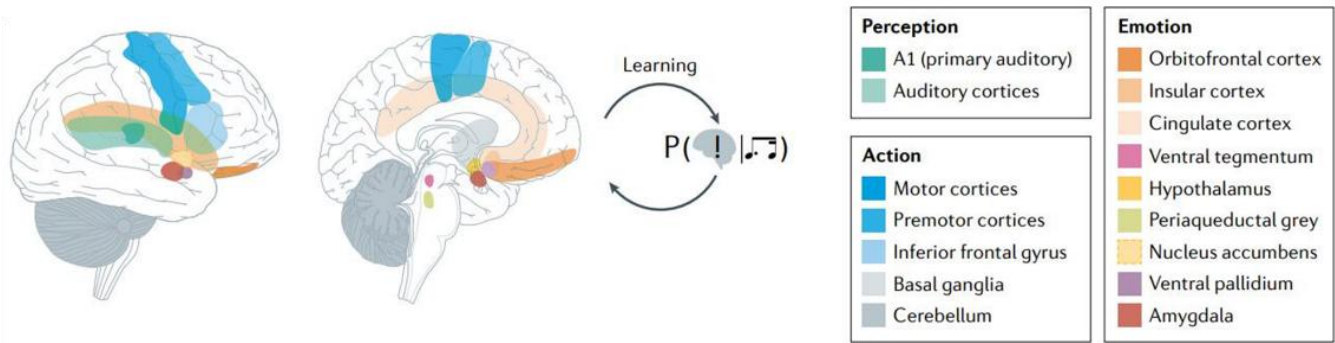


Figure 2. The Relationship between Music Effects and Psychological Emotions

People Face Feelings of Disharmony at the Psychological Level

The composition of music components and the psychological effects stimulated are shown in Figure 3. Concordance comes from the simplicity of the proportional relationship between the vibration frequencies of two sound waves - the smaller the common multiple of the proportion, the more harmonious the auditory experience (Du & Leung, 2022). The larger the common multiple of the balance, the more dissonant the aural experience. In music, discordant and unstable features are prevalent, such as the sharpness of minor second intervals; In the tone of instruments, instruments with fewer overtones have stronger coherence than instruments with more overtones. For example, the timbre of flutes and organ organs is relatively pure because their sounds are closest to pure notes, and overtones are much less than those of the violin family (Dunbar et al., 2022). The more overtones, the more muscular the dissonance, and the higher the tension, making the sound extremely dissonant. These are all factors of dissonance and instability in music. Of course, the above characteristics may also vary due to certain other factors, such as changes in the vocal range that directly affect the degree of harmony in the instrument's timbre (Fraenkel, 2020).

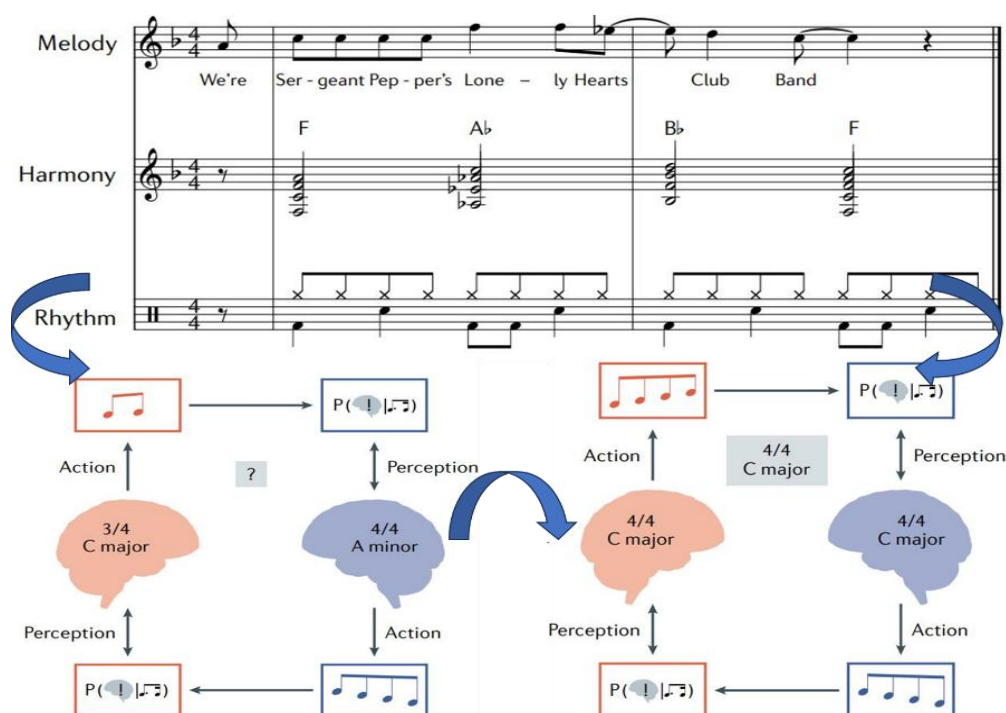


Figure 3. Composition of Music Components and Psychological Effects Stimulated

THE FACTORS OF SOUND IN HISTORICAL MOVIES AND TELEVISION AND ITS CONTRAST EFFECT

The Factors of Sound in Historical Movies and Television

The simultaneous sound usually refers to recording the sound of people or environments related to the scene during the early stage of shooting, such as the voice during interviews or the ambient sound at the shooting site (Garg, Chaturvedi, Kaur, Varshney, & Parashar, 2022). Collecting on-site simultaneous sound is very important for creating historical movies and television. On the one hand, concurrent sound can reduce the use of commentary to a certain extent, thereby reducing the impact of creators' subjective thoughts on historical movies and television creation (Guimares, 2021). Taking the historical movie and television work "Young Marshal" as an example, the use of commentary in the movie is quite limited compared to similar historical movies and television. The entire movie uses much space to showcase Zhang Xueliang's extraordinary experiences when he was young. Compared to the carefully crafted commentary by the creator, the audience is more willing to listen to the portrayal techniques of the third chapter of the historical literature, historical movies, and TV series by Young Marshal (Guo & Xiao, 2021), 21 telling their extraordinary life firsthand. On the other hand, the moderate use of simultaneous sound in historical movies and television can genuinely reproduce the original appearance of events reflected in historical movies and television, enhancing the infectivity of historical movies and television. The mechanism of music's impact on emotional psychology in historical movies and television is shown in Figure 4.

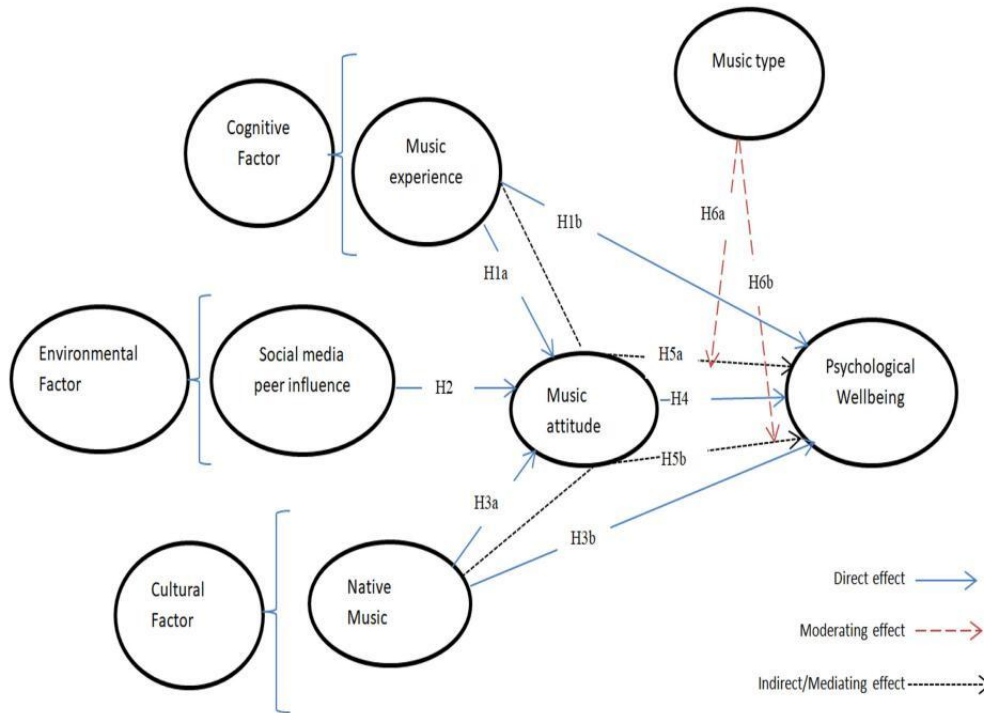


Figure 4. The Impact Mechanism of Music on Emotional Psychology in Historical Movies and TV Shows

The music in historical movies and television is mainly narrated in fragmented forms in conjunction with images. Adding appropriate background music at the beginning and end of the movie can serve as a prelude and ending, laying the foundation for the narrative of historical movies and creating an atmosphere (Hashemi, Zarani, Heidari, & Borhani, 2022). There are two main ways to obtain background music for historical movies and TV shows. One is to use music databases from the internet to select suitable music, then process the audio later to fit the image of historical movies and TV shows; The second is to hire composers to specialize in composing and recording music (Herbrand & Silverman, 2021). The soundtrack in the historical movie and television work "Young Marshal" is all sourced from music material websites and mainstream music platforms (He et al, 2020). Hiring professional composers to create background music based on the historical movie and television themes is too expensive for individual creators, and selecting music that meets the aesthetic requirements of creators from the music material library has become a cost - effective choice. Music is an artistic form that expresses emotions in a delicate, direct, and rich manner (Huang & Yang, 2022). Historical movies and television can complement the visual factors to create artistic conception, enhancing the expressive and infectious power of historical movies and television.

The Psychoacoustic Response Mechanism of Music

Psychological Perception of Sound Loudness

Loudness is the first level of human ear perception of sound. "Any sound, including sound in art, must first consider the basic element of sound intensity, that is, sound intensity." The loudness of sound is closely related to emotional fluctuations (Jannusch, Shannon, Völler, Murphy, & Mullins, 2021). When creating the sound of movies and television works, unique loudness designs for language and sound effects often bring unexpected results. In practical creation, it should also be noted that the relative loudness perception of different frequency components of sound by the human ear varies with the overall sound intensity (Kirk, Ngnoumen, Clausel, & Purvis, 2022). When the sound intensity is high, the human ear is more sensitive to low frequencies. Therefore, the recording and mixing process needs to be done at a listening level of no less than 85dB to prevent excessive compensation for low and high frequencies caused by mixing at low levels, which may affect the playback effect. Loud sounds often indicate the emergence of significant events (Li et al, 2020). When creating sound for a manned rocket launch scene, deliberately adjusting the sound level to 110dB or even higher not only restores the actual situation of the manned rocket launch but also brings a sense of "earth-shaking and mountain shaking". This technique of using loud sounds to highlight the importance of events, express the inner emotions of characters, and stimulate the audience's psychology to achieve specific artistic effects is often used in movie and television dramas (Moreno & Woodruff, 2022).

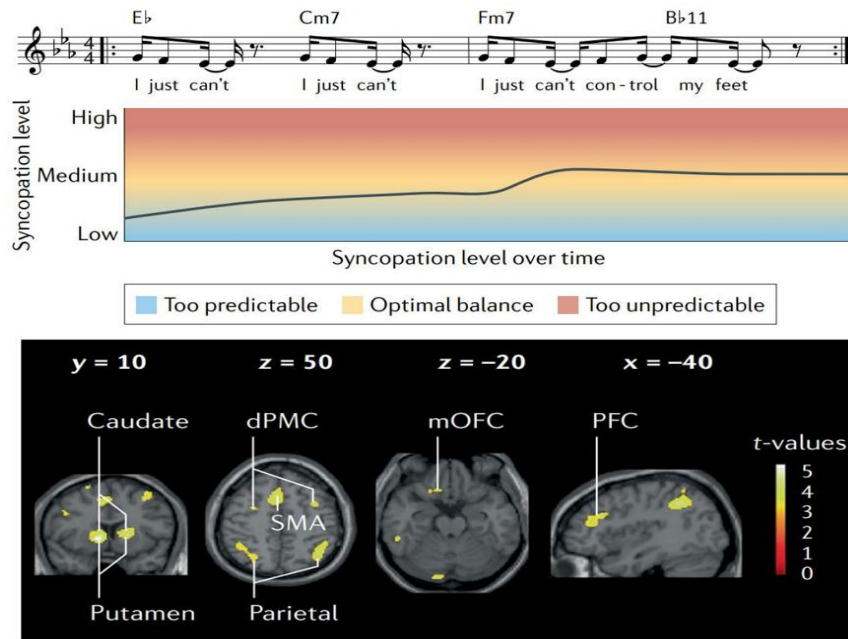


Figure 5. The Relationship between Sound Loudness and Psychological Pleasure Response

By amplifying the loudness of previously silent or imperceptible sound factors, the character's mind is depicted, and the theme is revealed, which is to some extent more relevant than using images or inner monologues. The relationship between sound loudness and psychological pleasure response is shown in Figure 5.

Psychological Perception of Sound Frequency

Frequency is an essential element that makes up sound, and the subjective perception of sound frequency by humans is pitch, also known as pitch (Ostendorf, Schlüter, & Hackländer, 2020). The frequency of sound is mapped to the proper level of movies, and this perception of tone not only exists in people's physiological cognition of sound but also relates to their perception of language and music tones. The sounds in movies are all compound sounds, different from the direct physiological stimulation of pure tones on the auditory system (Qi et al, 2021). The tone cognition of compound sounds not only includes physiological reactions but also brings specific psychological effects. The psychological perception brought about by changes in proper frequency is different from the psychological impacts of loudness. Frequency perception requires a time delay, that is, a longer duration of proper stimulation (Rahiem, 2021). Therefore, frequency-related psychological effects are mainly attached to music and musical sound in creation. The psychological impact of proper frequency changes on spatial and temporal performance is shown in Figure 6.

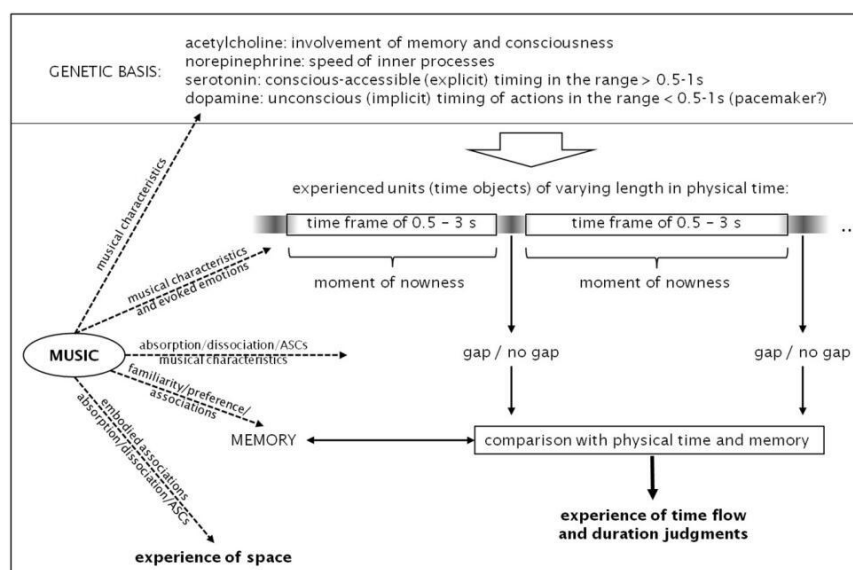


Figure 6. Psychological Impact of Proper Frequency Changes on the Spatial and Temporal Performance

High frequency is usually the first level of human frequency perception. In the sound design of movie and television works, high-frequency sound is often used to represent smaller volume sound sources and acceleration (Reimnitz & Silverman, 2020). By increasing high-frequency components of music or sound effects, the distance between the characters and the audience is brought closer, creating a sense of encirclement and presence, and bringing psychological pressure to the audience. It is also a commonly used technique in the sound creation of movie and television works. The frequency of bullets passing and shells falling in movie and television works gradually increases from low to high, bringing a certain sense of oppression to the audience (Strong, 2022). In sound creation, techniques that weaken high-frequency sound are often used to express the character's state, especially in war movies. The protagonist was knocked to the ground by the explosion, and due to the loudness of the blast exceeding the human ear's limit, caused a brief hearing loss. All the sounds around him became turbid and unclear, accompanied by low-frequency "buzzing" sounds, to reflect the injured state of the characters in the play and give the audience a sense of being present.

The Psychological Effect of Sound Time and Space Sense

The screen can be transformed into time and space using similar lighting, colour tones, machine positions, scheduling, composition, and other methods (Shi, Hu, Fan, & Qiu, 2021). However, if multiple scenes are involved, it may inevitably be somewhat cumbersome. By using sound, complexity can be reduced to simplicity. Cleverly utilizing techniques such as voiceover, ambient sound, and spatial perspective effects of sound, as well as artistic creation techniques, not only serves the director's creative intention, but enriches the movie content (Deveci Topal, Kolburan Geçer, & Çoban Budak, 2023), and promotes narrative, but also has a remarkable impact on the audience's psychology. The spatiotemporal effect presented by sound can form a sound artistic conception, express specific emotions, and even affect scene scheduling and screen editing to a certain extent. The relationship between proper spatiotemporal transformation and psychological effects is shown in Figure 7.

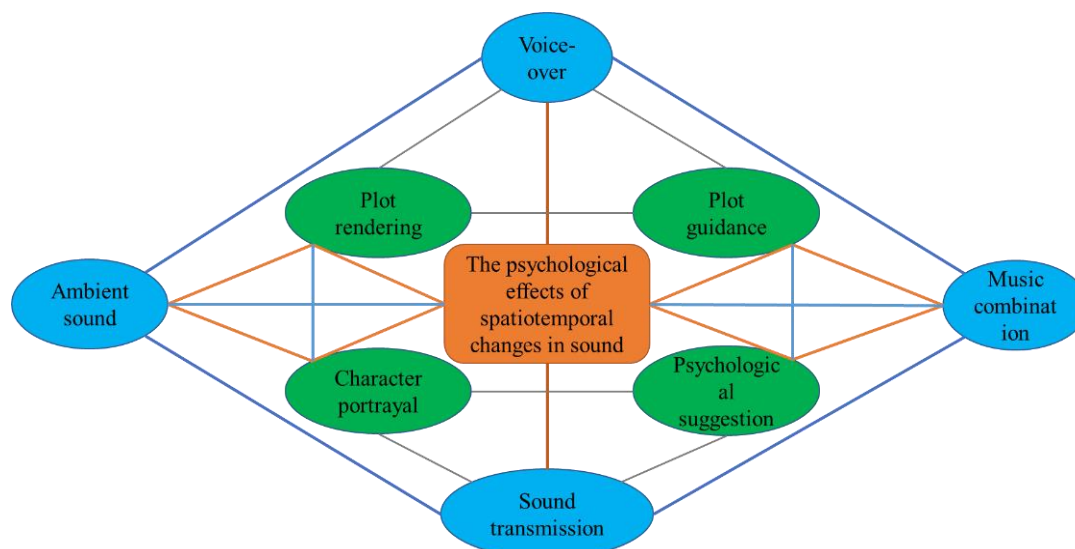


Figure 7. The Interrelationship between Sound Spatiotemporal Transformation and Psychological Effects

People's perception of time is unstable. Human senses - eyes, ears, mouth, nose, and skin - are all perceptions of space. We can judge the distance, size, and form of motion of play based on our eyes and ears, but we do not have a sense of time (Liuchang Xu, Zheng, D. Xu, & Liang Xu, 2021). Therefore, human perception of time is highly susceptible to psychological factors and varies with the amount of information processed per unit of time. There are two forms of time in movie and television works: emotional time and objective time. Objective time is the projection time, which can be measured by a clock, while emotional time is the product of the combination of projection time and the psychological time of audience appreciation. The quality of the movie discussed by the audience is essentially a reflection of subjective time. Unlike the use of camera assembly and spatial scheduling to change the narrative time of a movie, the impact of sound on the audience's perception of time is unique. Whether the audience feels irritable, joyful, or excited can affect their perception of time.

EMPIRICAL ANALYSIS OF MUSIC PSYCHOLOGY IN MOVIE AND TELEVISION WORKS

Analysis of the Psychological Effects of Changes in Sound Melody

Psychological Effects Caused by Changes in Sound Rhythm

In the movie 'Titanic', Rose, after telling the story of her life, comes to the side of the boat barefoot at night. As Ruth walked towards the stern of the boat, the main melody was "My Heart Will Go On", and the vocals hummed as the main melody instrument. The flute and horn played the piece alternately. The movie and television footage and corresponding music lines are shown in Figure 8. The flute part is mainly responsible for the high-pitched part of the second half. The cello plays the five notes of the chord through a long letter, while the bass plays the root note of the chord. Before Ruth stood at the stern of the ship and took out the necklace, the rhythm was composed of eighth and quarter notes. Perform a "spatiotemporal" transformation by adding a whole note and a half note. From this point on, both music and visuals began to imply that the audience's next scene was an "unreal" one, a transition segment using psychological techniques. The camera sways from the old lady's sleeping posture to the old lady's life photo, when the theme weakens from the previous melody and is replaced by psychologically suggestive short segments that do not reveal the music. Then return to the main piece of 'My Heart Will Go On'. However, the main piece of this segment is not the exact repetition as the previous segment. Still, it is accompanied by another hint of undisclosed music, supplemented by the sound of waves. At the same time, the picture is a suggestive "dream" backdrop, which transforms from the gloomy scene of a sunken ship at the bottom of the sea to the luxurious Titanic of the past. As the Titanic gradually becomes more apparent, the "My Heart Will Go On" piece gradually weakens from the human voice, the piece gradually strengthens, and finally becomes intense. The scene is also clear to the point where the attendants of the 'nonreal' Titanic open the door to greet them.



Figure 8. Movie and Television Shots and Corresponding Music Score Lines

When the waiter opened the door, the scene changed from "dream" to clear, and passengers swarmed until Jack turned around. At this point, the location has a straightforward plot, and the montage technique of transitioning from "real" to "nonreal" in the front location is completed. The soundtrack technique of this segment is to run through the entire transition with the main melody of "My Heart Will Go On", ensuring a continuous and smooth process. However, the handling techniques for the front, change, and back segments are entirely different. Except for multiple changes in the camera, the old lady goes back to the young Ruth, flashes back to the past, and then leads into a dream through an imaginary lens. From the ruins of the underwater sunken ship to the "nonreal" Titanic party scene. As Harry fell into the air towards the courtroom, the arpeggios of the strings moved forward and down. Subsequently, other orchestral instruments were added, and the entire orchestra ended with a large segment. The use of large segmentation here is particularly prominent and strengthens the sense of urgency, as well as emphasizing Harry's fall on the chair next to the principal. The changes in music melody and corresponding psychological situations are shown in Figure 9.

The syncopation pattern of the preceding paragraph of music

Closing with large segmentation

Highlighted and strengthened the sense of urgency, emphasizing that Harry fell on the chair next to the principal

Progressive Ascending of Octals

Arpeggio continuous bow forward and backward

Figure 9. Changes in Music Melody and Corresponding Psychological Situations

Psychological Effects Caused by Changes in Sound Frequency

In the movie "Titanic", Ruth stands in front of the stern railing, where the horn plays the main melody and the flute plays the main melody. The short flute plays the three notes of the main chord in the high octave of the flute and forms a polyphony with the flute, and in the following three bars, it forms a homophonic high octave with the flute. At the same time as Ruth took out the necklace, the high notes of the string music and the high notes of the vocal hum were simultaneously performed, completing the transformation of "time and space". In the movie "Harry Potter and the Goblet of Fire", Harry lowers his head to look at the meditation pool and uses a high-frequency instrument, the piccolo, to gradually increase the sound range. As Harry's wand pointed towards the meditation pool, the wind chime immediately joined. The note re-played by the piccolo is transferred to the violin, thereby completing the transformation of time and space. In the movie "The Fantasy Drifting of the Youth Faction", as the Youth Faction stands up and looks into the sea, there is a long string accompanied by humming vocals. At this point, the scene shows the tiger looking at the reflection in the water, with the strings playing long notes. When the timpani and wind chimes appear, time and space transform into nonreal space, and Malimba takes over to continue the melody. The rhythm also changes to a stable quarter-note performance. The sound frequency and situational changes in the movie and television are shown in Figure 10.

Much Faster $\text{♩} = 100$

Ob. Bass, Vln1, Vln2

Piano

Harp

Vln1,2

Vla.

Vcl.

Bass

Long note playing of string music

Malimba takes over and continues the melody

Stable quarter notes

Strong weak relationship in obvious sections

Figure 10. Sound Frequency and Context Transformation in Movie and Television

The Psychological Effects Caused by the Deliberate Emphasis on Music

The segment of "Titanic" begins after the time and space transition in the 18th bar. The main melody is hummed by the brass and string vocals, with the piece progressing upwards and repeatedly emphasized three times. Advancing up the industry will give people a sense of motivation or emphasis. The second tone introduces the ensemble of the entire string orchestra; The third sound, accompanied by a brief and powerful orchestral ensemble, implies a transition in time and space, reminding the audience that they have now entered another room. This compares the stable duration but unstable speed of these two pieces of music in the 'Dream'. Due to the addition of the bass's plucking technique in "reality", compared to the previous passage, the bass's stable playing technique is more like a metronome to imply a return to the "real" space, giving a sense of stability, indicating that everything has returned to peace. This section is also the final suite of the entire drama (Welcome Home Mr Cobb). After most viewers watch the complete movie, they do not understand whether they have finally returned to "reality". But in the composition technique of music, we can analyze from this that Cobb has a high probability of returning to "reality".

Analysis of the Psychological Effects of Music on Tense Paragraphs in Different Scenes

This chapter will analyze the psychological effects of tense passages in the music of James Newton Howard's three movies from three perspectives: scene, function, and emotion. Mysterious Village "is a supernatural" limited space "horror movie nominated for Best Original Score at the 77th Academy Awards in 2005. The overall rhythm of the movie is relatively slow, with few scenes having a fast pace. The movie begins to depict the uneasy atmosphere of the village at night and the overall atmosphere as a contrast. The overall rhythm of the movie "Special Agent Salt" is swift, with very few scenes with a slow rhythm. The so-called "dynamic" scenes refer to scenes with a relatively fast rhythm, including chase scenes and chaotic scenes, collectively known as dynamic scenes. The so-called "static" scene refers to a static scene where the rhythm of the picture tends to be stable while the rhythm of the image is relatively slow.

The Psychological Effects of Music in Dynamic Scenes

The score example in the dynamic scene of 'Mysterious Village' is shown in Figure 11. The composer used the bass clarinet and bassoon in the music of this scene, and the addition of these two variant instruments expanded the bass range of the woodwind, enriching the sound of the woodwind bass range. In the instant scene where the villagers saw the monster entering the village, the bass clarinet, bassoon, bassoon, cello, and bass played together to depict the dense rhythm that appeared when the beast appeared. The sudden appearance of the monster was portrayed very well with a powerful force. The bass area of the bass clarinet has a dark tone, which sounds mysterious, vague, and ominous; The sound in the bass area of the bassoon is more sturdy and resilient; The sound of a string bass instrument is deep, rich, and heavy. The mysterious and dark sound of the bass area of the bass clarinet blends the bass of the bassoon and strings, making the blurred sound of the string bass area more flexible and colourful. With the combined effect of multiple composite tones, the combination of solid intensity makes the tension of the sound more prominent. At the same time, the oboe, horn, trumpet, trombone, piano, and violin together play short and powerful eighth notes, enriching the tone of the stress while also increasing the intensity and thickness of the style, almost concentrated in the mid to low range of all instruments, providing strong support for the tense atmosphere at night and the sudden moment of tension, while also depicting the fear in the hearts of the villagers to the extreme.



Bass clarinet and bassoon	Dense rhythm+sudden intensity	The expression of the bass clarinet is mysterious and vague	Octave notes highlight tense atmosphere
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Figure 11. The Tense Atmosphere Created by Different Instrument Combinations

The Psychological Effects of Music in Static Scenes

The static scene spectrum of "The Rebellion" is shown in Figure 12. The clip tells the story of how after entering deep winter, they found it even more difficult to live in camps built in the forest. They had no clothes for the winter, and their food became scarce. The cold weather in winter made it difficult for them to find alternative food. The composer used the ancient ethnic instrument cymbal, which existed as early as the 12th century BC. It is a type of percussion cymbal played with fingers, consisting of two small copper plates pressed into a bowl shape, and later evolved from a bowl shape to a slightly curved copper plate. In the 20th century, round cymbals of different sizes were arranged in different pitch and semitone order and placed on a support frame, which is now known as semitone cymbals. Its timbre is similar to that of a bell qin, but the remaining notes are longer and the timbre is more crisp. The cymbal played a long note with extremely weak force, but after repeating it, it did not continue, indicating that the composer hoped to use the instrument's timbre purposefully and systematically to enhance the atmosphere. At the same time, the high - pitched flute is played weakly in the mid-range, at which time the timbre of the flute's range reveals a hint of indifference in a gentle and mellow tone. The oboe and clarinet are also played weakly in the mid-range, and the pastoral timbre of the oboe blends the richness of the clarinet. The full and dramatic timbre of the high range in the bassoon seems to express the coldness and inexplicable sadness of winter; In the string part, the long notes played by the violin in the low range of the instrument are mournful and sorrowful, while the thick bass of the cello seems to express deep and indescribable sadness. Music does not sound during the most intense battle scenes, but rather when the war is over and calmed down and withdrawn. Perhaps the composer is trying to reflect this tension that has been ravaged by war from another perspective. All of them are the performance of bass instruments, which are more oppressive in color. The wind gongs play long notes on this basis, The oppression of the color of the bass instruments further accentuates the gloomy atmosphere, highlighting the tense atmosphere of the Jewish people being persecuted, homeless, and in danger of being killed at any time.

The figure illustrates the psychological infection effect of music in a static atmosphere. It includes two film stills at the top showing a group of people in a forest setting. Below the stills is a musical score for Violins 1,2, Viola, Cello, and Bass. To the right of the score is a flowchart with three boxes connected by downward arrows. The first box says "The timbre of the flute expresses indifference". The second box says "The high pitched part of the bassoon expresses inexplicable sadness". The third box says "Long notes combined with low notes create a gloomy atmosphere".

Figure 12. Psychological Infection Effect of Music in a Static Atmosphere

CONCLUSION

This study takes music and its corresponding psychological effects in the historical movie works as the research object, sorts out the internal connection between movie music form factors and audience psychology, and then analyzes tense psychological emotions and their musical psychology factors through movie examples. The main research conclusions are as follows:

The stimulating effect of music on positive emotions is complementary to the leisure and relaxation effects of movie and television media and electronic games. Not only positive emotional music, but even negative emotional music can help stimulate listeners' various emotions and emotional experiences, thereby achieving the effect of venting negative emotions.

The loudness of sound is closely related to the fluctuation of emotions. The sounds in movies are all compound sounds, which is different from the direct physiological stimulation of pure tones on the auditory system. The tone cognition of compound sounds not only includes physiological reactions but also brings specific psychological effects. The psychological perception brought about by changes in sound frequency is different from the psychological effects of loudness.

The rhythm, frequency, and emphasis of the sound can more effectively and accurately guide the audience to realize the spatiotemporal transformation in the movie, providing them with a better viewing experience and enabling them to understand the content of the movie more accurately. These extremely obvious psychological suggestive methods, combined with symbolic music, can create a certain "hypnotic" effect on the whole.

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