

## Mickey Mousing Technique for the Unique Expression of Music in Nature Documentaries

Hyung-Jin Kim<sup>1</sup>, Kang-iL Um<sup>2</sup>

<sup>1</sup>Music Director, Sound Design Team, Korean Broadcasting System, Korea

<sup>2</sup>Adjunct Professor, Department of Broadcasting Entertainment, Paekche Institute of the Arts, Korea

E-mail: <sup>1</sup>[musickr@kbs.co.kr](mailto:musickr@kbs.co.kr), <sup>2</sup>[kyleum1004@gmail.com](mailto:kyleum1004@gmail.com)

### Abstract

*There is a unique method of musical expression in the nature documentary. The expression method is Mickey Mousing technique, which expresses the movement of animals with music. The Mickey mousing technique can also be used in other types of documentaries, but it is most prominently used in nature documentaries. The Mickey Mousing technique cannot be used in any field other than music composition, because the composer should describe the movement of animals by playing music to match the animal's movements exactly. It is also because they have to play the instrument separately according to the sound source. In this study, we examined the nature documentaries broadcast by KBS over the last five years and analyzed the cases of Mickey Mousing technique. Therefore, we obtained research results that the Mickey Mousing technique is necessary and that the music composition is also necessary as a background music of nature documentaries.*

**Key Words:** Mickey Mousing Technique, Nature Documentaries, Music Composition, Original Sound Track

### 1. Introduction

A nature documentary (or wildlife documentary) is a genre of documentary film or series that focuses on the beauty of nature and the mystery of life phenomena. It is a genre of documentary film dealing with wild animals, plants, or other non-human living creatures, usually concentrating on video taken in their natural habitat. Nature documentary is a documentary that aims for a viewer to understand a survival laws of exciting wild animals and plants in a specific area, by providing the viewer with scenes made by observing the nature for a long time; showing the viewer an ecology and laws of nature, the reason of nature, and the living providence of nature. In 1954, the BBC started airing <Zoo Quest>, which is a series of multi-part nature documentaries broadcast on the BBC Television Service between 1954 and 1963. Other early nature documentaries include <Fur and Feathers> shown on Capital Broadcast Center (CBC) from 1955 to 1956 [1].

Manuscript Received: September. 29, 2020 / Revised: October. 7, 2020 / Accepted: October. 14, 2020

Corresponding Author: [musickr@kbs.co.kr](mailto:musickr@kbs.co.kr)

Tel: +82-10-2646-0110, Fax: +82-0504-379-0110

Music Director, Sound Design Team, Korean Broadcasting System, Korea

Due to the characteristics of the nature documentary, it is very important for film staff to pay close attention so that the animals to be observed are not disturbed by the staff. Since they have no idea when, where, or what will happen, they have to wait for a long time to film the target. Since filming can only be done if nature permits a producer (PD), Shin Dong-man, who has long filmed Korean Broadcasting System (KBS) nature documentaries, says that nature documentaries are "a record of variables [2]."

In a nature documentary that records these variables, interesting and mysterious situations of animals and plants are shown, and background music must also express those situations. If we use a music that depicts the beauty of nature or the personification of the material for background music, then the feeling of the animals can be expressed dramatically. A leitmotiv is a "short, constantly recurring musical phrase"[3], associated with a particular person, place, or idea. It is closely related to the musical concepts of motto-theme. Here the musical phrase is a substantial musical thought, which ends with a musical punctuation called a cadence. Phrases are created in music through an interaction of melody, harmony, and rhythm [3]. Also, the use of a leitmotiv technique (theme) that repeatedly uses the subject of a protagonist increases the sense of immersion in the protagonist. In animation and film, "Mickey Mousing" is a film technique that syncs the accompanying music with the actions on screen, such as cartoon motion, music, and voice, "Matching movement to music," or, "The exact segmentation of the music analogue to the picture." [4, 5]. In particular, it is a Mickey Mousing technique (or motion music) that expresses the movements of animals as a unique technique for background music in nature documentaries. The first known use of Mickey Mousing was in the first Mickey Mouse cartoon by Walt Disney [5]. The term comes from the early and mid-production Walt Disney films, where the music almost completely works to mimic the animated motions of the characters. It is characterized by the fact that music is expressed like an effective sound by accurately matching the movement of the character to the sound of the music, which leads to the effect of amplifying the emotion of the character; it is a "Matching movement to music [4]."

When animals or insects move finely, it is very effective to use the Mickey Mousing technique to capture fine movements in the scene. For example, it is used to describe in detail and fun the appearance of a small lizard walking fast, the appearance of a cat walking slowly, and the urgent situation in which a hawk chases in a hurry to hunt for prey. Since the music to be inserted into the scene of such a documentary is not stored in the library, you cannot select and use the library music. Therefore, by composing music suitable for the background music of the scene, it is necessary to express it in depth and detail according to the flow of the image. Since experimental films are not distributed commercially, most film makers are their own producers and financiers. Films can take a very long time to complete. The process of development is often inscribed in the film, a notable example being Jones Mecas' <Lost lost lost (1976)> which was shot over thirteen years [6].

A documentary that uses the music you have composed can give the viewers more fun and deep emotion, and the viewers can understand more parts. In this research, we investigated the effects of the composed music by examining examples of using Mickey Mousing techniques in documentary works that KBS broadcast for five years from 2014 to 2019. It received a prize or received good reviews in and out of KBS. The three of composed music of KBS documentaries we investigated were <Little Tern That is Pecking a Baby Born to Others>, <Earth-Digging Mongolian Racerunner >, and <Ant Trap>.

## **2. Secrets of the Little Tern in Andong-ho Lake**

The little tern is a seabird. This bird breeds on the coasts and inland waterways. It is strongly migratory, wintering in the subtropical and tropical oceans. This nature documentary was broadcast by KBS in October 2018. This work received the Best Film Awards in the Wild Animal Category at the "2019 Houston Film Festival" held in the United States in 2019 and the "Abbeville Bird and Wildlife Festival" in Abbeville (or

Azeville), France, which is recognized as one of the world's three largest natural documentary festivals.

The World Fest-Houston International Film Festival was founded in 1968 as the International Film Society, the event is held annually in April. It is considered to be the third longest running and oldest independent film and video festival in the world [7, 8, 9]. Abbeville Bird and Nature Festival in an International film festival related to bird, wildlife or environment. Since 1991, birds the festival takes place in France, every year in April [10]. This work is a documentary produced by KBS staff in a small sandy island in Andong-ho for 10 months, and it received good reviews for its touching description of the ecology of the little tern struggling for survival. This work was evaluated as opening a new horizon for nature documentary of Korea by using unmanned



**Figure 1. Mother tern pecking a squab with her beak**

remote systems in order to film wild ecology, which is hard to detect, such as the invasion of eagle-owl, adoption of a cub in another nest, and the dramatic escape of pups from the situation where breeding grounds (nests) were flooded due to the rise of the lake's water surface during the rainy season. Figure 1 shows a mother little tern pecking a baby with her beak to kill it in order to reduce competition among the squab. Little terns of Andong-ho Lake live on a small sand island, breeding in groups. They bite and peck with their beaks for the purpose of killing their babies in order to compete fiercely for survival. By the eagle-owl invading in the middle of the night, all the babies of the little terns on the island are eaten. This nature documentary depicts little terns striving to survive in a situation where they are always in danger. This picture shows a nest and little tern without mother. The nest is invaded by other tern's mother, the invading mother is biting the young and throwing it away by the river, and another black tern is pecking with its beak to kill the abandoned young. Figure 2 shows the notes of music composed by applying the Mickey Mousing technique for use in the background music of the documentary <Secrets of the Little Tern in Andong-ho Lake>. The background music

is composed so that music can be heard whenever the little tern pecks a squab with her beak.

**Other chicks pecking**

Every time another mother pecks a chick

**Figure 2. Music note 1, Little tern that is pecking a baby born to others**

In this scene, tremolo technique by cello, viola, and violin was used in order to compose background music for describing an uneasy and tense situation. Whenever one female tern pecked at the squab of another female tern, Timpani and the contrabass were played at the same time. In most cases, in order for a composer to write music to be inserted into such a documentary, the composer plays music according to the characteristics of the scene while looking directly at the screen.

### **3. Mongolian Racerunner hunting a Prey**

The Mongolian racerunner (*Eremias argus*) is a small lacertid lizard species, and its distribution range encompasses the Korean Peninsula, Mongolia, China and Russia. *Eremias argus* is widespread, but populations on the Korean Peninsula are small and declining, provoking concerns that genetic diversity is being lost [11]. This scene is a 40-minute broadcast in a 60-minute documentary from Hahoe Village in 'Waterway of Senbi (Confucian Scholar)'. This scene shows one of the images of a Mongolian racerunner hiding in a hideout made by digging the ground, and as soon as it discovers a prey, it comes out of the sand and eats it.

#### **3.1 Scene where a Mongolian Racerunner Hides in Hideout.**

Figure 3 shows a scene where a Mongolian racerunner hides in a hideout made by digging the sandy soil.



**Figure 3. Hideout of Mongolian racerunner**

Figure 4 is a music composed for the scene where a Mongolian racerunner digs the ground and hides in a hiding place.

Ground digger Mongolian racerunner

The musical score is titled "Ground digger Mongolian racerunner" and is set in 3/4 time with a tempo of 105. It consists of three systems of staves. The first system includes Oboe and Marimba parts. The Oboe part has a treble clef and a key signature of one flat. The Marimba part has a treble clef and a key signature of one flat. The second system includes Oboe and Mar. (Marimba) parts. The Oboe part has a treble clef and a key signature of one flat. The Mar. part has a treble clef and a key signature of one flat. The third system includes Oboe and Mar. parts. The Oboe part has a treble clef and a key signature of one flat. The Mar. part has a treble clef and a key signature of one flat. The score includes chords such as Am, E, Dm, Am/C, B<sup>b</sup>, and E. The Marimba part is highlighted with red circles and labeled "Chromatic Approach".

**Figure 4. Music note 2, Earth-digging Mongolian racerunner**

The feature of this song is that marimba plays using the chromatic approach technique in accordance with the movement of the tail while Mongolian Racerunner digging the ground, so the sound of digging the ground sounds like a marimba sound, creating an effect that makes the situation feel cute. A chromatic approach (also approach chord and dominant approach chords) is a chord one half-step higher or lower than the goal [12].

### 3.2 Hunting a Prey after Exiting the Hideout

Figure 5 shows one of the images of a Mongolian Racerunner hiding in a hideout and coming out of the sand rapidly as soon as it finds a prey (worm).



Figure 5. Prey hunting of Mongolian racerunner

Figure 6 shows the notes of the composed music used as the background music for the video of Mongolian racerunner eating prey (worm) on the sand.

Mongolian racerunner hunting for food

At the pace of your steps      When eating

Figure 6. Music note 3, Prey hunting of Mongolian racerunner

In this scene, the bassoon is played in accordance with the hiding motion of the Mongolian racerunner and raising of its head, the marimba is played in accordance with the blink of an eye, and the marimba is played in a chromatic scale in accordance with the number and time of steps when running suddenly, and the background music ends at the moment when the racerunner eat the prey. These musical performances have a sound effect rather than a beat concept, so it cannot be made by using the library, the existing original sound track (OST), or other selected music. Since the existing music for selection have a perfect blending of each instrument, it is



impossible to separate the individual sound of each instrument, and there is a limit to editing to accurately fit the speed or cut of the scenes.

## 4. Ant Hunting by Ghost Ant

### 4.1 Composition Music for the Scene of the Ghost ant Hunting an Ant

For this scene, the note of background music composed using Mickey Mousing techniques is shown in Figure 7.

**Ant trap**

Chromatic scale

A B

Allegro

Clarinet in Bb

Clarinet in Bb

Clarinet in Bb

Bass Clarinet in Bb

Allegro

Marimba

Ant slipping

B Chromatic scale

C D

Cl.

Cl.

Cl.

B. Cl.

Mar.

Ant trying to escape

ant-lion appears

D

Cl.

Cl.

Cl.

B. Cl.

Mar.

The tug of war between ants and ant-lion

Figure 7. Note of background music composed for the scene of the ghost ant hunting an ant.

## **4.2 The Trap Dug by Ghost Ant**

Figure 8 shows a ghost ant waiting to eat an ant after digging a trap.



**Figure 8. Ghost ant waiting to eat an ant.**

The background music in Figure 8 is part A in the music note in Figure 7. Part A expresses interestingly, with a chromatic scale, the appearance of the ghost ants, moving little by little, while waiting to eat an ant after digging a trap. The characteristic instrument for this situation is the clarinet. Clarinet music is played to match the flow of the screen, just as it is responding to small movements.

## **4.3 Scene of an Ant Falls into a Trap**

Figure 9 shows an ant falling into a trap.



**Figure 9. The scene where the ant falls into a trap.**

The background music of figure 9 is part B shown in the note of figure 7. Part B of Figure 7 is a Chromatic scale representation of an ant moving and falling into a trap. When the ant slides down the clarinet is played in fast tempo, to make the sound of the clarinet as if it were the sound of the ant sliding. In this case, too, the exact timing and length of time are very important, so the selected music cannot be used. The composed music be used as an alternative.

## **4.4 scene of an ant trying to get out of the trap**

Figure 10 shows a scene of an ant trying to get out of the trap in the sandy field.





**Figure 10. An ant trying to get out of the trap.**

The background music of figure 10 is part C and D shown in the note of figure 7. Part C of Figure 7 shows the movement of ants fighting to get out of the trap. In part D of Figure 7, bass clarinet announces the appearance of ghost ants. In order to describe the beginning of the tug of war between ghost ants and ants, the two clarinets were played in the minor 2nd harmonic interval and the perfect 4th harmonic interval [13].

#### **4. Conclusion**

By currently, nature documentaries are not being actively produced. Currently, most nature documentaries have been produced in a special edition. Since the cost is low when a broadcasting station requests a music production from an outsourcing company, they want to use a library music instead of a composed music. However, due to the nature of a nature documentary, there are cases where it is impossible to use music without composing. This is the case with the Mickey Mousing technique, which is an area that cannot be performed by a selection of music. This is because, as can be seen from the above example, in many cases it is necessary for the performers to directly play the several instruments by discriminating the sound of each instrument at an appropriate moment in accordance with the fine movements of animals. We interviewed 20 KBS music directors. As a result, they chose nature documentary as the most necessary genre for music composing, and the most important reason was Mickey Mousing technique. The 'Mickey Mousing Technique,' in which music is played in response to the animal's funny movements, can make viewers immerse themselves by causing interest. However, such background music cannot be played by 'selection' of music, but only by 'composition' of music. Therefore, it can be seen that composed music in a documentary is an essential element. We will be able to produce a documentary with a high level of completion to provide the vitality of animals to viewers with a high level of immersion, by using Mickey Mouse techniques,

#### **References**

- [1] Ian Mc Taggart-Cowan bio shines light on pioneering TV nature program host, October 16, 2015.  
<https://www.cbc.ca/news/canada/british-columbia/ian-mctaggart-cowan-bio-shines-light-on-pioneering-tv-nature-program-host-1.3271571>.
- [2] Taken from the PD interview at KBS, October 11, 2020.
- [3] Bruce Benward and Marilyn Saker, "Music: In Theory and Practice, Vol. I," Seventh Edition. McGraw-Hill. ISBN 978-0-07-294262-0, p.89, 2003.
- [4] Andreas Rauscher, "Scoring Play: Soundtracks and Video Game Genres", Music and Game: Perspectives on a Popular Alliance, p.276, 2012.
- [5] Peter Wegele, "Max Steiner: Composing, Casablanca, and the Golden Age of Film Music," Rowman & Littlefield. ISBN 9781442231146. p.37, 2014

- [6] Pip Chodorov and Minchol Cha, "2001:A Space Odyssey as a Work of Experimental Cinema:Focused on Its Convergence of Technical Innovation and Aesthetic Challenges," *International Journal of Advanced Smart Convergence(IJASC)*," Vol. 9, No. 1, pp.113-124, June , 2019.
- [7] "World Fest-Houston International Film Festival, SHOOT online," [www.shootonline.com](http://www.shootonline.com). , November 5, 2020.
- [8] Katricia Lang, "WorldFest-Houston Celebrates 50 Years of the Best in Video, Film and Commercials," Houston Press, November 26, 2020.
- [9] "After 50 Years, Houston's WorldFest Film Festival Continues to Launch Rising Hollywood Stars," Houstonia, November 15, 2020.
- [10] <https://www.france-voyage.com/events/bird-nature-festival-44.htm>
- [11] Han-Chan Park , Ho Young Suk, Eu-Jin Jeong, Dae-Sik Park, Hang Lee, and Mi-Sook Min, "Population genetic structure of endangered Mongolian racerunner (*Eremias argus*) from the Korean Peninsula." Nov., 2014., 41(11):7339-47. doi: 10.1007/s11033-014-3623-6, August 3, 2014. DOI: 10.1007/s11033-014-3623-6
- [12] Sokolow, Fred (2002). *Jazzing It Up*, p.11. ISBN0-7935-9112-0.
- [13] H. G. Trudi and V. K. Charity, "Math and Music: Harmonious Connections," Dale Seymour Publications. ISBN 0-86651-829-0, p.33, 1995.