Analysing Hans Zimmer`s epic scoring style in "The Dark Knight Rises"

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In film scoring world, Hans Zimmer is one of the composers who succeeded in developing his own signature sound which they call it the 'epic style'. This research aims to study the development of leitmotif and the usage of minimalism in the 'The Dark Knight Rises' 2012 Batman`s film score. The objectives of this study are to identify the minimalism techniques used by Hans Zimmer in the scoring and to analyse the motivic development used to expand Batman`s leitmotif. The overall data were derived from secondary data and the outcome of the findings are through score analysis. As a result, it was found that Hans Zimmer uses several approaches such as cathartic ostinato in maximal minimalism, marcato motto, the usage of abstract anthem, repetitions and several other motivic development techniques to expand his ideas. In conclusion, the data and findings identified in this research can be a point of reference and bench marking among budding film composers to make their way in creating epic film scores.

Key words: *Hans Zimmer, epic scoring technique, maximal minimalism, cathartic ostinato, leitmotif, motivic development, compositional style, epic film score.*

Introduction

Composers all around the world possess their individual sound and signature. One can take years to develop their craft as there are various techniques and skills to grow in order to create a solid-mature outcome. To improve one`s skill, film composers need to adapt, understand and learn different types of compositional techniques from various film composers (Tajuddin et al., 2021). In this research particularly, we will be focusing on one of Hans Zimmer`s work.

Hans Zimmer is a very well-known film scorer who had composed for over hundred films and his success in this career were shown in his achievements through multiple awards, nominations and net worth. Many will anticipate his new compositions as he had succeeded in

developing his own signature sound and compositional style which was generally described as an epic scoring with its relation to a high masculinity character (Lehman, 2016). Combining modern and traditional classical approach, Zimmer`s work has been a point of reference for many composers nowadays. According to Hexel (2016), "Zimmer`s music has had an idiosyncratic sound in discrete time periods of his working life thus far".

According to Richards (2013), The Dark Knight Rises (TDKR) made in 2012 is a part of a series called The Dark Knight Trilogy. All three films were directed by Christopher Nolan (Ronin, 2019) and the sole reason this particular film score was chosen by the authors was due to Zimmer`s achievement as the 'Best Composer of The Year' at the Classical Brits Awards in 2013 for the music he made for TDKR (BBC News, 2013).

Literature Review

Hans Florian Zimmer was not impressed with the classical piano training he received during his young age. According to Hexel (2016), even though he had shown interest in the piano, his first teacher only lasted for two (2) weeks and as he disliked the strict routine and pressure upon him. It was said that, because of his refusal, he could not read conventional music notation until today. However, according to Matthews (2012) he still loves doing music and has been in a few bands playing electric keyboard and synthesizer. It is worthy to note that composers are self-taught or had little formal education or opportunities to become role-models of genres (Mohammed, 2016, 2021) due to their musical language or unique compositional styles. Zimmer had moved to London and started writing as a writer for television commercial jingles and that was where his journey in music for media started. Taking a quote from Zimmer, "*I have no technique and I have no formal education, so the only thing I know is how to write about something that's inside of me*". (Morrow, 2018). Looking back at his statements and history, it is not surprising that his music and sound possessed a different stylistic approach than those who practiced conventional film scoring. Taking a quote from one of his lectures under the topic "Sound Palettes" in MasterClass, "*I mean, the stylized lighting and the sound had to make sense. I think it's just how I hear the world maybe more than I see the world*".

The term leitmotif can be defined as the association and identification of a character, situation, object or idea with a musical motif which is repeated and developed narratively throughout the work (Audissino, 2014). In addition, Murphy (2019) also mentions that a leitmotif is a fragmentary or a more complete musical idea that necessarily represents a specific character, location, sentiment, or some other noun in the story. According to Scheurer (2008), leitmotif contributes as an emotional device in order to set the mood based on the character's state in each scene. In Final Fantasy VIII (Square, 1999), "*the love leitmotif was first heard when the sweethearts first met as a lively waltz. When the lovers reunite, the leitmotif returns as a soaring lyrical ballad. The vocals or the leitmotif itself caught us off guard as the pre-eminent emotive force linking romantic narrative arcs across the game's multiple timelines and generations*". These leitmotifs are later expanded and used in various ways to fit in different cues by using

various   melodic   development   techniques.

All music composition was based on one or more main motives that came to our mind during the pre-composition state. It is then crafted and designed to fit a certain section or phrases in order to build a complete work. There are few techniques that can be done in order to use a motive as a generating device. According to Denisch (2017), there are around eight (8) types of technique that can be used. The first one is a sequence which later divides into two categories; 'real sequence' and 'tonal sequence'. Real sequence refers to a repetition of exactly the same interval distance and could be moved to another key or modulate and this is slightly different from 'tonal sequence'. This technique will have one or more intervals adjusted in favouring the diatonic scale. Rhythmic diminution and augmentation on the other hand is based on rhythmic permutations. The motives can be lengthened or shortened according to suitability. The most frequent usage is to make each note twice as long or shorter. Another technique mentioned by Denisch (2017) is the 'change of mode', where the same material can be directed into different kinds of modes available such as Mixolydian, Pentatonic or the traditional major and minor ones. By doing so, the motives can be adjusted into various levels of brightness and darkness. Other than that, there are also inversion, where the notes go in the opposite direction and retrograde, which means going backwards.

In general, minimalist pieces are quite diverse, especially in terms of style. Some combination of the characteristics is enough to let the listener identify one. According to Doran (2008), there are ten possible ways to apply this technique and how it may affect the music. Firstly, drone technique, diatonicism, static harmony (music may have a limited set of chords or may be repetitive for some time), static instrumentation, phasing or additive processes as structural device, numerous repetitions, steady pulse (rhythmically limited), lack of melodious material (only short patterns), limited expressiveness or slow changes and lastly drawn out or hypnotic sensibility (creating a hypnotic state or different sense of time). Doran (2008) also stated that minimalist music can also be seen in different aspects, where it can be invisible at some point, resulting in a smooth transition between cuts due to its constant and precisely repeating pulse. He also added that this technique could also work well in setting up the mood for a scene such as tension or excitement however it does not work well with romantic movies. Other than that, a minimalist music score is suitable for longer cues such as montages and fillers between gaps. Minimalism managed to provide a stronger sense of unity compared to the classical film scoring practice. Gorbman (2000) stated that minimalism is different from what classical Hollywood scores do, they relied on themes.

According to Lehman (2016), in a recording done by Christopher Nolan on scoring Inception, Nolan had pointed out a term called 'maximal minimalism'. Nolan stated that "Hans is a minimalist composer with a sort of maximalist production sense. So, he'll write these incredibly specific and simple pieces, but the way in which he'll then record and produce them in such a colossal scale and with so much movement and drive". One of the ways he achieves

this style was by creating the 'cathartic ostinato'; cues that are built from the repetition and cumulative intensification of a short motivic module (Lehman, 2016). This also related to Ismail & Loo (2021) research in which they found particular music techniques could be used to make a film interesting and able to attract the audience's attention.

Zimmer`s epic scoring style has also been reported to have connections with five (5) other technique. Lehman (2016) had identified, the ponderous passacaglia, the marcato motto, the consequential chorale, the Teutonic theme, and the abstract anthem. According to Lehman, "Ponderous Passacaglia is a trope in which contrapuntal lines, usually scores for strings, are added gradually on top of a glacially paced bassline. Zimmer's Passacaglia mimic the Goreckian template, starting from the lowest reaches of the contrabasses and slowly going upwards methodically and eventually reaching the violins. The counterpoint does not exceed five independent parts, with each additional voice adding volume and emotional intensity. Marcato motto on the other hand defines as a "loud and catchy melodic phrase, usually scored for strings or full orchestra and usually with an emphasis on brass. It is said that this technique are also a key component of thrillers and historical sets films (Lehman, 2016). The next technique mentioned by Lehman (2016) is the Consequential Chorale, "Zimmer`s epic style usually uses minor-mode progressions within textures resembling chorale harmonizations. This technique could shift the composer`s capability with classical-style functional harmony into a more dramatic language using chord inversions, expressive suspensions and heavily stereotyped cadential patterns. Moving on to the Teutonic theme, it's a style which combines classical harmony with his rock-informed love of drum loops, electronics and head-banging rhythms. This theme portrays a 'Germanic-sounding' musical technique that represents the qualities of strength and honour which was inspired by Wagner`s heroic themes; the Siegfried`s motif in the Ring cycle (Lehman, 2016). Last but not least, the abstract anthem is based on a series of minimally complex motivic ideas that persists through a cue or a score. Anti-thematic attitude, short and basic unit of 'recognizable melodic information' is a bonus point to be reconstructed and structured in various ways (Lehman, 2016). He also added that, *"at their most successful, underscore constructed this way can be kaleidoscopically entrancing, especially when conjoined with a cathartic ostinato"*(Lehman, 2016).

Methodology

In order to investigate the techniques used by Hans Zimmer in creating this masterpiece, the authors decided to use case study as a type of qualitative research to collect the data. According to Starman (2013), *"case studies have been largely used in social sciences and have been found to be especially valuable in practice-oriented fields".* Score analysation will be done in order to identify the specific techniques used by Zimmer. All information regarding minimalism, leitmotifs and motive developments are obtained from various existing secondary data such as online journals, articles, papers and ebooks. Listening, observation and analysation are done together with visuals, audio and primarily scores.

A full 298 pages complete score compilation of TDKR was retrieved from an online open source at kupdf.net titled Hans Zimmer the Dark Knight Rises Complete Score uploaded by author; adrimenamusic (2017). A total of 50 music cues were found and the authors specifically choose to investigate only one cue titled 3M22 v3.04 which contains the Batman theme. This decision and selection were done only after watching the full movie of TDKR. To be specific, this music cue appears at the 53:02 minute to 57:16 minute with a length duration of 4 minutes and 14 sec overall. Several other motives were also found in this scoring; however, the authors will only focus on the development of one main leitmotif which belongs to the main character; Batman.

Figure 1. Example of the music cue score titled 3M22v3.04

Results

The analysis was done in two parts with the first round focused on the minimalism technique and second on the motivic development of the leitmotif. The researchers came across few other techniques through their reading and it has been identified that in this particular cue, Zimmer utilised three (3) techniques to achieve his minimalist scoring approach. As mentioned in the literature review above, Nolan calls Zimmer`s technique as a maximal minimalism (Lehman, 2016). Frank Lehman had identified that a technique called 'Cathartic Ostinato' is the technique that contributes to the maximal minimalism character.
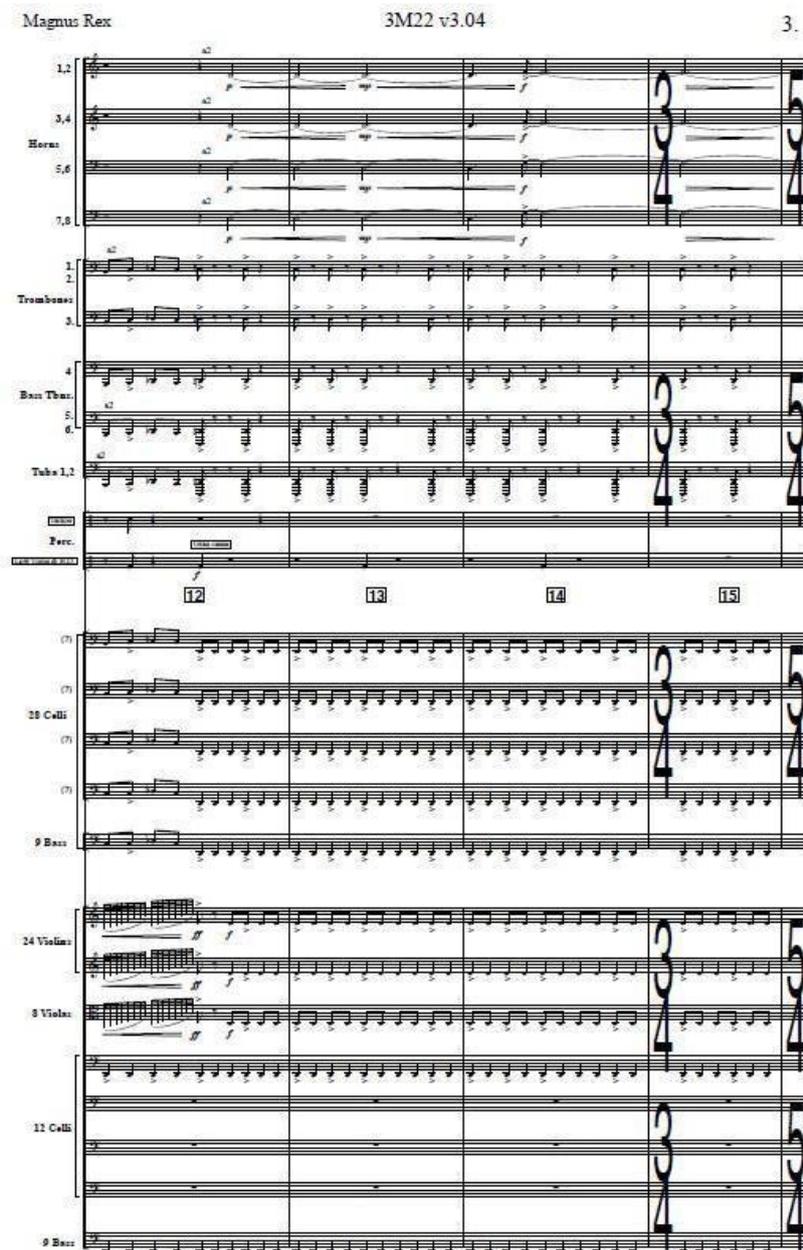
Figure 2. Excerpt that shows the cathartic ostinato.

As seen in figure 2, a technique called 'Cathartic Ostinato' is built from the repetition and progressive build-up of a short motivic module. The simple melodic lines combined with catchy bass are suitable to invoke repetitions (Lehman, 2016). The main motives; a simple two-notes D and F were played by the horns. The bass section from the strings and brass both play different rhythmic patterns but still remains in the same crochet feel. All these instruments playing together later create a unison-like material which leads to what Lehman (2016) describes as "simplicity in service of maximalist ends: maximal textural complexity and detail, maximum volume, maximum emotive power". Overall, this technique dominates about 90% of the scoring as it was being seen used from bar 12 to 95.

From out of five techniques mentioned earlier by Lehman (2016) used by Zimmer in this piece to achieve his "epic-style", the researchers identified two (2) of them were used in this particular score. The first one is mainly coming from the extensive use of the articulation; Marcato Motto. This term is defined as a "short, loud and catchy melodic phrase, scored for either strings or full tutti, with an emphasis on brass, though, interestingly, rarely trumpets" (Lehman, 2016).

Figure 3. Example of the excerpt from bar 6 – 11.

As reflected in figure 3, Zimmer uses a lot of accents. A short two bar motif shown in cello proves the catchy melodic characters for marcato motto. Throughout the piece, horns mostly played the passive rhythm notes compared to the strings which enhanced the epic scoring style. Most sections contain this technique and is repeated numerously.

Another approach and so-called formula are the abstract anthem. Lehman (2016) stated that, Zimmer is seen to avoid conventional melody, instead he exploits the minimal complex motivic idea and expand the basic unit persistently through a cue or even score. The same technique was also applied in the first movie from this series; Batman Begins (2008). According to

Lehman (2016), the cue 'Mollosuss' demonstrates a "continuous sequence and supplies a long-breathed melody slightly in Wagnerian along with consequent structure and firm diatonic support.

Figure 4. Batman`s main theme consists of only two notes played by the horns.

Note that figure 4, 5 and 6 are all from the same section; bar 40-43. Based on both primary and secondary themes, the melodies are all based on a small melodic cell and portrays a call and response structure. Both melody fragments contain less than five (5) notes and the dynamics of the passages constantly changes resulting in a wave-like movement in the melody despite being repetitive.

Figure 5. Bass section is playing the secondary theme at the same bar.

Based on figure 6 below, the diatonic chords of D minor (bar 40-41) were organized effectively. Some melodies are still repeated until bar 43 whereas some changes after 1 bar to another. Most of the changes happen in the cello section, notes are shifted within the chord tones. This method is constantly shown in the rest of the score.

Figure 6. The diatonic harmonies that accompany both primary and secondary themes.

In terms of the motivic development on the Batman's leitmotif, few techniques were discovered. Since the notes of the leitmotif are very minimal, Zimmer has tons of room to expand his materials. Just by flipping through the score before analysing, it is evident that Zimmer really fully utilised the theme as it occurs several times in the score. However, this analysis will discuss a more specific technique applied to the leitmotif. Below are some of the figures captured and identified.
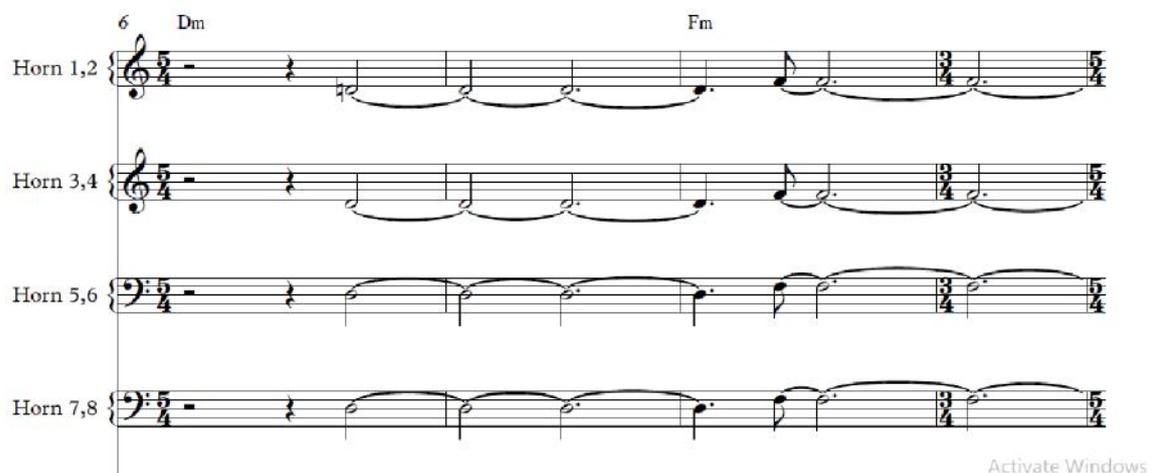
Figure 7. The first leitmotif statement was in bar 6.

Figure 8. The leitmotif appears again in bar 11 with different note values.

These long notes of D and F have been found appearing five (5) times at bar 10, 34, 38, 43, 56 and 60. During this analysis, it found that Zimmer had proposed a secondary theme as a counterpoint of the two-notes leitmotif. This secondary motif has a C# note under a D minor chord which means that the motif is a mix of D minor and D major scale; borrowing the note from its parallel key. Examples are as shown in the figure below.

Figure 9. The first appearance of the secondary motif is at bar 34.

The secondary motif is spotted a few times, accompanying the leitmotif. In order for the music to sync with the visual, the score contains numerous changes of the time signature. Rhythmic alterations such as diminution and augmentation were used to suit the adjustment. Referring to figure 7 and 8, the note values for both D and F were shortened to suit the time signature. Another example of rhythmic diminution is shown as below in figure 10 where it occurs on the secondary motif.
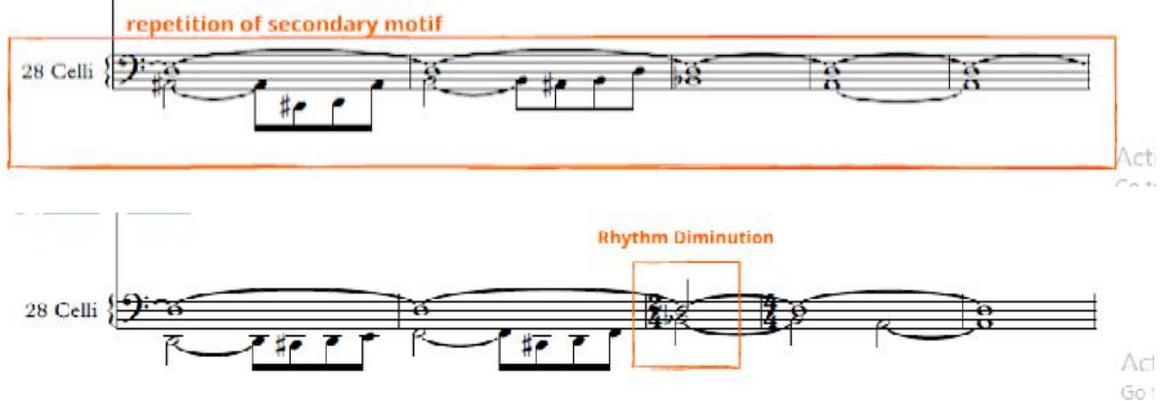
Figure 10. An example of rhythmic diminution.

Due to its recurring changes on time signature as mentioned before, other than lengthening and shortening the note value. Zimmer also uses 'extension' technique for both primary and secondary themes.

Figure 11. Excerpt is taken from bar 38 highlighting both intervallic alteration and extension technique used on the secondary motif.

Another technique that Zimmer uses to expand his leitmotif is the 'intervallic alteration'. The same leitmotif. Retaining the same pattern and rhythm, this technique is perfect to use whenever a chord changes and only pitches are affected.
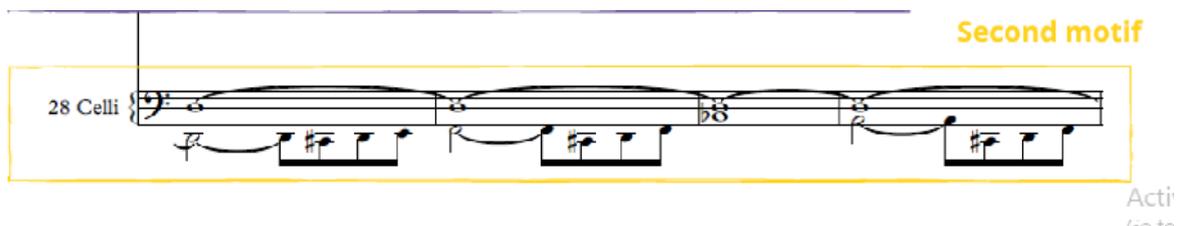
Figure 12. Original sequence of the secondary motif.

Align to its name and definition; intervallic alteration technique only alters the pitches however still maintaining its arc. This technique will give more variation of harmonies to the composer to explore. Notice that at the end of the original motif; figure 12, the 4th bar still repeats the same melody whereas when using extension, Zimmer omits them and extends the F minor[11] chord to the next bars.

Discussion and Conclusion

Generally, based upon the analysis done, it is proven that Hans Zimmer effectively used minimalism in structuring his work. Although not all techniques mentioned by Lehman (2016) were evident, Zimmer still uses many of them. There might be a high chance that the other techniques were used in the other music cues in TDKR. One interesting finding discovered here was the secondary motif which acts as a counterpart to the simple leitmotif. It has given the passage an uplifting outcome with its major-mode character.

The overall music cues consist of small musical fragments repetition religiously and good usage of dynamics throughout the piece contributes to the a wavy-almost-hypnotic feel. Even though the fact that Hans Zimmer was not classically trained as other film scores which can be seemed like a minus point, his ability to 'hear' and 'see' the music through the visual is very impressive. He was able to create an unconventional recipe that is effective, catchy and most importantly 'epic', which had made him a superstar.

Zimmer`s epic scoring has definitely given a very strong masculine impression to its craft. The marcatos possessed an aggressive-militarism sound which had always been suitable for intense and suspenseful situations. According to Lehman (2016), "many Zimmerisms, like the marcato action motifs and percussion loops are manifestly aimed at injecting a scene with as much testosterone-infused energy as technologically possible". Although not all of his music is in such a state, there are compositions that is "appropriately brimming with nonmasculine-coded musical devices" (Lehman., 2016).

From the authors` observation, there had been a partnership of virtual sound sample libraries and plug-ins with Spitfire Audio and not to mention various videos on YouTube teaching and sharing tips on how to 'sound' like Hans Zimmer. There is a high number of demands wanting to create the same epic feel to their works.

The authors conclude that Zimmer`s consistent use of the techniques throughout the scoring not only help to unify the whole album but as an evidence towards developing his own signature style. It does not matter if a heroic theme only consists of two-notes leitmotifs but what matters is the way it is developed and designed throughout the entire piece. The maximalist minimalism term best describes Zimmer`s scoring style and it has proven to work well in many films and settings.

It has been an interesting journey for the researcher to explore, identify and learn massively through the analysation. Also, it is still important for one to check and balance the usage of the techniques so that it is not overly done and sounds so much like Hans Zimmer. It is great to learn and imitate other composers` work, but it would be great if one can create their own identity and sound.

Acknowledgement

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