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# The implementation of canon training to increase harmony sensitivity of choir members

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ABSTRACT: This study aims to increase the harmony sensitivity of choir members in Senior High School 1 Rembang. This study uses classroom action research methods consisting of two cycles by using Kemmis & Taggart model. The subject of this study was members of the choir. This research uses descriptive qualitative and quantitative techniques. The results showed that by implementing canon training, the harmony sensitivity of choir members in Senior High School 1 Rembang increased. This can be seen from the average results of precycle, the cycle I, and the Cycle II. Harmony sensitivity was measured by harmonising choir members at the last cycle test. The result of the average value of pre-cycle was 61.17 and this increased to 70.45 after the action of Cycle I and to 79.71 after the action of Cycle II. Based on the results of the average value, it can be concluded that the implementation of canon training increased the harmony sensitivity of Senior High School 1 Rembang's choir members.

## 1 INTRODUCTION

The choir is synonymous with the art of vocal production (Daugherty, 1999). Good vocal processing in a choir has two important elements to consider and comprehend: technical and non-technical. Technical elements include techniques in expressing melody, harmony and rhythm, while non-technical elements emphasise beauty including taste, dynamics, tempo and interpretation.

The progress of music in Indonesia has developed quite rapidly including vocal arts, especially choirs. There is evidence of this by the participation of Indonesians in the classic and national folklore (folk songs) categories at various choir competitions held at regional, national, or international levels.

Previous observations of the Senior High School 1 Rembang's choir revealed that the mastery of materials consisting of intonation, rhythm, and harmony of the choir members in singing songs arranged for soprano, alto, tenor, and bass had not been maximised. The choir members were not able to distinguish between the main melody and the accompaniment melody. There was often a lack of sensitivity of the choir members in animating harmony and stabilising the frequency of the tones when the melody was sung together. It was therefore established that effective training was needed so that the song materials could be understood and sung properly.

This research was conducted by applying canon training to the choir and having a melody sung together with different durations and repetitively performed by the melody leader and melody follower. The implementation of canon training in this research was expected to increase the harmony sensitivity among members of the Senior High School 1 Rembang's choir, so that the inconsistencies in harmony could be improved, or, in other words, so that the choir could produce better harmonies. Thus, the choir would be able to perform a musical work well and properly. The purpose of this research was to increase the harmony sensitivity of Senior High School 1 Rembang's choir members.

#### 2 RELATED WORKS/LITERATURE REVIEW

#### 2.1 Harmony

According to Banoe (2003, p. 192), harmony is a form of conformity and beauty. It means that a harmony will be formed in two possibilities called consonance or dissonance; beautiful or not beautiful. Harmony will be formed if there is a melody or tone of more than one sound which is sounded simultaneously. To harmonise a melody requires an effort of processes that will produce a harmony and is known as harmonisation. There are several ways to combine tones that produce a harmony/beauty according to Banoe (2003, p. 192) and they are:

- Two-voice harmony. This is a very basic form of harmony that uses a combination of two
  tones. This harmonisation can determine major and minor qualities, for example the tone
  "do" combined with the tone "mi" becomes major third/m3, while the tone "re" combined
  with the tone "fa" becomes a minor third/m3.
- 2) Three-voice harmony is the development of the two-voice harmony. It is also called a harmony of triad because it has a combination of three tones that are sounded simultaneously, for example, the tones "C", "E", "G" when sounded together will produce a C Major triad.
- 3) Four-voice harmony, the development of triad harmony, adds the triad harmony to the fourth tone from outside the triad tone by doubling one of the triad tones. One example is the combination of the tones "C", "E", "G", "c", which when sounded together will produce a C Major triad.
- 4) Five-voice harmony is commonly used for musical performances of an instrumental family such as the family of saxophone instruments (full saxophones), or family of string instruments consisting of violin 1, violin 2, viola, cello and contrabass in which each musical instrument has a role as a high note, middle note or low note. However, five-voice harmony might be applied to a variety of other musical instruments.
- Eight-voice harmony is a doubling of the four-voice harmony. The sound produced will be solid and attractive.

According to Kamien (1988), harmony is a combination of two or more tones that are sounded simultaneously, so that the sound produced is harmonious. According to Simanung-kalit (2013), harmony in the narrow definition is "a simultaneous sound which has at least three tones or called chords". According to experts, harmony is various sounds or tones that are sounded or played simultaneously.

#### 2.2 Choir

Choral singing in a choir is a simultaneous singing activity that focuses on following the harmonious harmony and providing a good interpretation of the songs sung/performed. A choir is a set or a number of singers or vocal groups and is based around each type of voice. According to Banoe (2003, p. 320), a choir is a group of sounds grouped into several sound lines, namely Soprano, Alto, Tenor and Bass (SATB). A children's choir is not able to produce SATB, but the sound lines may at least be divided into two. It can be concluded that a choir is a number of singers forming a team or vocal group and that these singers are grouped according to their type of voice.

# 2.2.1 Types of choirs

Prier (2003, p. 13) stated that there are four compositions of choirs in Indonesia and that they are: 1) children choirs; 2) teenage choirs; 3) adult choirs; 4) similar choirs. The subject of this research is the adult choir. The definition of an adult choir, Prier (2003, p. 14), is that the choir members are generally over the age of 17 and that the members have voices that already

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show the character of adults' voices. The number of members in an adult choir is at least 20; there is no maximum number.

The divisions between the choir members are: Soprano = 3, Alto = 2, Tenor = 2, Bass = 3. SATB choirs for adults are considered to have the most rounded and balanced sound because each of the sounds can stand alone, especially if the song is in a polyphonic style. If the members are trained properly, the choir will develop to a professional level and may be recruited for musical performance accompanied by dance and so on. In this research, there are more than 20 members of Senior High School 1 Rembang choir and the members met the range of adult soprano, alto, tenor and bass.

As stated in his journal article titled 'A Prescribed Alternative Mainstream: Popular Music and Canon Formation' (2006), Karja explained that 'The fundamental criterion by which Bohlman separates different folk music canons is 'the extensiveness of the community'. Other decisive factors include transmission and origin of repertories, specialisation of musicians and the relationship to other musical genres. It is worth noting that Bohlman does not deny that there may be other patterns of canon formation which are based on different criteriaMeanwhile, Falck (1972) identifies that there are many types of canon as he said that, canon and voice exchange are commonly regarded as a peculiarly English specialty, and the priority of the Summer Canon is the earliest example of its kind. This has led to the assumption that only in England was this particular form of music known before the 14th century. There is also the discovery of two round canons from the second half of the 12th century, one of which (Leto leta concio) may even be German.

## 2.2.2 Vocal technique

In this research, vocal techniques that become the focus to assess the level of harmony sensitivity are explained as follows:

### 1) Intonation

According to the PML (2013), intonation is a technique in sounding tones properly. Meanwhile Kamien (1988), intonation is a technique that can determine high-low pitch accuracy.

It can be concluded that intonation is a high and low tone that must be reached with the right frequency. However, not everyone can sing the tone correctly.

The Music Centre Team (*Liturgi*) (2013) argues that there are several reasons why the tones sung are less precise and they are: a) the nuance in singing activities is too strained; b) lack of concentration in singing; c) singers are out of breath when singing; d) tones repeated or retained is tiring; e) singers are less sensitive to harmony when voices are combined; f) singers are not good at producing tones; g) certain tones are difficult to master; h) certain tones are difficult to sing; i) letters with dark and light colours determine the pitch; j) singers tend to follow other tones; k) failed when switching between tones.

Intonation can be interpreted as a reference in knowing the sensitivity level of the harmony of choir members because if one of the choir members doesn't reach the tone correctly, the harmony sung sounds inharmonious.

## 2) Rhythm

Simanungkalit (2013) stated that rhythm is a sequence of differences in the value of the tone sung. An example is sol tone (5) sounded for four beats that can be written as || 5... ||, while rhythm is the length short of the note and the light weight of the pressure or accent on the note. According to Kamien (1988), rhythm is the soul of a song. This means that in determining the perfect scale in interpreting songs, rhythm is needed.

### 3) Balance

Simanungkalit (2013) stated that there are three things that need to be considered to make a harmonious choir and they are: (1) balance; (2) blending (integration); (3) sonority (loudness of sound). This research puts more emphasis on the balance in determining the level of harmony sensitivity. A good choir must have a sound balance between soprano, alto, tenor and

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bass in singing a song that has been arranged. This balance needs to be understood to avoid making a group of dominant sound. The balance can include the volume level of sound (the loudness level of sound produced).

#### 3 MATERIAL & METHOD

# 3.1 Types of research

This research was conducted by using Classroom Action Research (CAR). According to Suharsimi (2011), CAR is a study that describes the occurrence of causation from treatment, that observes what happens when treatment is given, and that describes the entire research process from the beginning to the impact of the treatment. Class action research is an action research conducted with the aim of improving the quality of learning practices in a class.

# 3.2 Time and place of the research

This research was conducted for two months from November to December 2016 in Senior High School 1 Rembang, which is located at Gajah Mada Street No. 5, Magersari, Rembang District, Rembang Regency, Central Java. The research was conducted because the members of the school choir were not yet sensitive to singing harmonies simultaneously. Thus, canon training was held as an effort to increase the harmony sensitivity of the choir members.

## 3.3 Subjects

The subjects of this research were 23 members of Senior High School 1 Rembang's choir consisting of 13 male students and 10 female students. The members were 11th and 12th grade students.

## 3.4 Data collection techniques

The data collection techniques used in this research were participatory observation, test and documentation. The research instrument was an assessment sheet with aspects of intonantion, rhythm, chord and balance.

## 3.5 Data analysis technique

The data analysis technique used in this research was the descriptive qualitative method used by describing developments in the cycles that were carried out continuously during the data collection until the indicators of harmony sensitivity and quantitative descriptive were achieved. The observational data were processed by giving a score on each aspect observed as follows: 4 (Very good); 3 (Good); 2 (Sufficient); 1 (Insufficient).

# 4 RESULTS AND DISCUSSION

# 4.1 Pre-cycle

The research began with pre-cycle activities, which were carried out with the aim of establishing the level of harmony sensitivity among the members of the choir before any action was taken. Pre-cycle activities were held at one meeting on 28 September 2016.. The choir members only sang their own melodies without hearing other melodies.

There were five choir members from the 23 members who met the standard of the successful criteria. The average result of the Senior High School 1 Rembang's choir members' harmony sensitivity at the pre-cycle stage was 61.17. Thus, the average value of the choir group including 18 members of the choir did not yet meet the standard of the criteria in the good category (70-89).

# 4.2 The implementation of Cycle I actions

Cycle I is the beginning of the actions that were implemented in the canon training to choir members. Cycle I activities were carried out for four meetings in November 2016. The actions in Cycle I were carried out as an effort to improve the early conditions (pre-cycle). The implementation of class action research in Cycle I included planning, action, observation and reflection.

Based on the observation results with the co-labourers conducted for four times per meeting, several things were obtained, and they were: 1) At the first meeting, the choir members were still not careful about producing tones and determining the rhythm when performing vocals and trying to sing a melody of canon 1 song entitled 'Magnificat'. The choir members had not yet sung smoothly the canon 'Magnificat' melody. Each choir member was not independent in listening to different voices; 2) At the second meeting, 11 choir members were not present due to illness and other agendas. The 12 choir members who attended were able to follow canon training activities with good enthusiasm and were willing to help the author to encourage the 11 absent members to prioritise canon training activities so that the research process could run smoothly. Due to the absence of 11 choir members, the mastery of canon 2 intonation and rhythm was not successful; 3) At the third meeting, all the choir members attended and followed the training activities properly and enthusiastically. Choir members could sing the canon 1 song 'Magnificat' well, but were not successful with canon 2. The song 'Bagimu Negeri' could be sung with quite good intonation and chords. However, the determination of rhythm and balance was not well mastered because the choir members paid less attention to the one-sixteenth (1) and triol (111) of the rhythm contained in partiture and to the vocal volume; 4) At the fourth meeting, the choir members could follow the Cycle I test well. The choir members also wanted more meetings as they realised that they still needed canon training to increase harmony sensitivity.

The results of harmony sensitivity increasing in Cycle I can be seen in Figure 1.

Based on Figure 1, it can be seen that the results of the Cycle I action obtained an average of 70.45 and showed an increase of 15% after the action was held. However, there were still 12 members of the choir who did not meet the criteria standards of the good category (70-89), so Cycle II needed to be carried out to increase the harmony sensitivity for all members of Senior High School 1 Rembang's choir.

## 4.3 The implementation of Cycle II actions

Cycle II is a follow-up action of the Cycle I. The action was carried out as an effort to improve the actions of Cycle I. The implementation of the Cycle II action is generally almost the same as the Cycle I and included planning, action, observation and reflection. The difference was that the steps chosen were adjusted following suggestions from collaborators. Cycle II activity was held over four meetings in December 2016.

Based on the observation results with the collaborators conducted for four times, several things could be concluded: 1) At the first meeting, the choir members were careful in producing tones and determining the rhythm when performing vocals. Then, when trying to sing a song melody entitled 'Are you sleeping?', the choir members were able to sing with proper intonation and



Figure 1. Assessment result graph of Pre-Cycle and Cycle I (Doc: Ardhy, 2016).

rhythm and found no difficulty in singing the song canonically. There was also an increase in the harmony sensitivity of the 'Bagimu Negeri' arrangement by SATB, which could be seen in the accuracy in singing the rhythms and chords produced. However, the choir members were not fluent in singing the 'Magnificat' song canonically because there were some members who had not memorised the melody of the song and that led to a disturbance of the harmony produced when the song was sung simultaneously. 2) At the second meeting, the choir members were careful in producing tones and rhythym in the 'Burung Hantu' song canonically. However, there was an increase in singing the 'Magnificat' and 'Bagimu Negeri' songs canonically that could be seen from the balance of the sound produced by each member of the choir. The choir members began to pay attention to aspects of intonation, rhythm, chord and balance when singing. 3) At the third meeting, the choir members could sing the 'Magnificat', 'Are you sleeping?', 'Burung Hantu' and 'Bagimu Negeri' songs well. Before the canon training activities of Cycle II were held at the third meeting, the choir members took their time to rehearse together independently. At this stage, the harmony sensitivity of the choir members sounded better. 4) At the fourth meeting, the choir members could take the Cycle II test well. The observation results of the Cycle II test were that each member of the choir had good harmony sensitivity. The choir members were able to sing the songs and paid more attention to intonation, rhythm, chord and balancing well and properly.

The results of harmony sensitivity increasing in the Cycle II can be seen in Figure 2.

Based on Figure 2, it can be seen that the results of the Cycle II action obtained an average value of 79.71 and showed an increase of 13% from Cycle I to Cycle II. In addition, all members of Senior High School I Rembang's choir met the criteria standards in the good category (70-89). Thus, Cycle II action was the final action conducted in this research.

#### 4.4 Discussion

Based on the results of the research, the implementation of canon training did increase the harmony sensitivity of Senior High School 1 Rembang's choir members. This can be seen from the results of the pre-cycle and training activities in Cycles I and II. The average value of the pre-cycle is 61.17 and of Cycle I is 70.45. Hence, the increase from the pre-cycle to Cycle I is 9.28 or an increase of 15%. The average value for Cycle I is 70.45 and for Cycle II is 79.71 and thus an increase of 9.26 or by 13% from Cycle I to Cycle II. Furthermore, from the average value of the pre-cycle to Cycle II, there was an increase of 18.54 or an increase of 30%.

The canon training began by delivering general knowledge about the canon and how to sing with four voices simultaneously and alternately. The action aimed to make the choir members have an idea of the canon concept so that they could sing the canon song well and properly. The definition of canon was explained in general and an example of how to sing the canon songs was given. There was an explanation not only of canon in general but of the relation of harmony and the importance of canon training in increasing harmony'. If the choir members started producing tones well and could maintain the melody without being affected by other



Figure 2. Cycle I and Cycle II Result graph (Doc: Ardhy, 2016).

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choir members' melodies, the harmony produced from the canon song sung simultaneously would sound harmonious. Thus, the harmony of the choir members in singing the song arranged by SATB could increase.

Furthermore, materials of three canon songs entitled 'Magnificat', 'Are you sleeping?' and 'Burung Hantu' were given, as well as other song material arranged by SATB entitled 'Bagimu Negeri'. These four songs were chosen considering the results of the members' ability of Senior High School 1 Rembang's choir in the pre-cycle and taking into account expert advice. The song materials were delivered as a training activity in stages based on the development of the harmony sensitivity level of the choir members. During the training, the material of canon songs and songs arranged by SATB was given, as well as an explanation of the definition of intonation, rhythm, chords, and balance in general. This was then implemented in the song materials aiming to make choir members have a reference in increasing harmony sensitivity.

Based on the results of the research, there was an increase of harmony sensitivity of Senior High School 1 Rembang's choir members that appeared in Cycles I and II or after the actions were undertaken in the form of canon training. Therefore, the implementation of the canon did increase the harmony sensitivity of Senior High School 1 Rembang's choir members as expected.

#### 5 CONCLUSION

There were two cycles given to the class research actions. In Cycle I, only 11 out of 23 members met the successful standard of the research that reached the value of ≥70. In Cycle II, all 23 choir members met the successful standard of the research and obtained an above 70 score.

Based on the results of the research, it can be seen that the average results of choir groups' harmony sensitivity in the tests held before given action or the pre-cycle was 61.17 then after an action was given or Cycle I, there was an increase in the average value of 70.45. Based on those average results, from the pre-cycle to Cycle I, there was an increase in harmony sensitivity of 15% ending in the Cycle II action with an average value of 79.71. From the values obtained from Cycles I and II, it can be concluded that there was an increase in the harmony sensitivity of the choir members by 13% or 30% as the whole increase from the pre-cycle to Cycle II.

The implementation of the actions conducted for two cycles was successful because the seven indicators of the criteria for the actions designed had been thoroughly met. Thus, it can be concluded that the implementation of the canon training did increase the harmony sensitivity of Senior High School 1 Rembang's choir members.

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