



## Aesthetic Response to Choral Music: Response Comparisons of Performer-Participants and Non-Performer Respondents

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### Abstract

*This study compared aesthetic responses (N=60) of college students currently enrolled in an auditioned women's chorus (n=30) and college students enrolled in undergraduate introductory music classes (n=30) to ascertain if there were differences in aesthetic response between those who had recently performed a particular musical work and those who had not performed the work. Both groups listened to an excerpt (2 min 17.5 s) of two sequential portions taken from Benjamin Britten's A Ceremony of Carols as performed by the same women's chorus in which half of the participants for this study were enrolled. Auditors responded in real time by manipulating a pointer on a Continuous Response Digital Interface (CRDI) dial (positive-negative). To examine group differences, the excerpt was analyzed in 11 time intervals of 12.5 seconds. Results indicated that (a) overall ratings of listeners from the performer group were significantly higher, (b) performer group listeners significantly changed their ratings across time, and (c) significant rating differences between performer-listeners and non-performer listeners were found for 5 of the 11 intervals. Results were discussed in terms of possibilities for further research, particularly with respect to investigating possible differences in scope and depth of aesthetic response among those who previously performed a particular choral composition and those who had no experience in performing that particular composition.*

The construct of "aesthetic experience" has long intrigued those who study, create, and teach music. Today's music educators, particularly those who may align themselves with perspectives of music education as aesthetic education, seek pedagogical clarity for such questions as: In what ways do students perceive musical aesthetic experiences? What musical elements are necessary for students to have an aesthetic experience? Is an aesthetic response to music learned or innately felt?

Estelle Jorgensen (2003) noted that in Western music education history "two streams of musical thought (*musica practica* and *musica theoretica*) have existed side-by-side, sometimes integrated, other times disjunct, but both impacting the practice of music education." Recent philosophies of music education have debated use of both approaches. On one hand Bennett Reimer (1989; 2003), Charles Leonard and Robert House (1959), among others, have advocated that a musical experience must include a learned aesthetic response for a more complete understanding or perception of musical elements. While such response can be learned in various ways, these thinkers have tended to indicate that music appreciation is best taught through listening to and analyzing musical works. On the other David Elliott (1995) and Thomas Regelski (1998), with others, have suggested that an aesthetic experience or response is acquired first through participation in or the practice of music.

Much research on aesthetic response in music has focused on listener preference, especially focusing on comparisons of musicians and non-musicians in listening experiences. Little variation in

aesthetic response between these groups was found across samples (Capperella-Sheldon, 1993; Frega, 2001; Flowers, 2001; Madsen, Britten, & Capperella-Sheldon, 1993; Madsen, Byrnes, Capperella-Sheldon, & Britten, 1993; Madsen & Geringer, 2001).

Studies focusing on specific variables also documented a lack of differences in aesthetic response to listening activities. Similarity in responses occurred regardless of performance medium (Frederickson, 2001), visual or aural stimulus (Lychner, 2000), or age differences (Lychner, 2000). In all of these investigations participants used a Continuous Response Digital Interface (CRDI) dial, which was developed to record continuous and/or discrete responses (Robinson, 1988). This measurement tool has been used widely in preference research (LeBlanc, Jin, Simpson, Stamou, & McCrary, 1998).

Realizing the possibility of confusion in defining aesthetic experience, Lychner (1998) conducted a poll regarding the term "aesthetic." He found that more than 50% of the 50 graduate and undergraduate students in various majors he questioned used the terms "beautiful," "feeling," and "emotion" synonymously. Consequently he engaged 256 undergraduate and graduate students including a portion of music majors ( $N=128$ ) to listen to four music examples. These students manipulated a Continuous Response Digital Interface dial (CRDI) in response to one of four conditions: (a) aesthetic response, (b) felt emotional response, (c) perceived tension, or (d) as they chose. He found similar responses among those using the terms "aesthetic," "felt-emotion," and, to his surprise, the free response control group.

Investigations of "aesthetic" response to this point have focused on groups of listeners with varying degrees of musical experience and found (a) that formal training does not necessarily lead to increased "aesthetic" awareness and (b) that participants in these studies responded to "emotional" aspects regardless of terminology or aesthetic definition (Madsen, 1999). This finding suggests that emotional response to music is not attained through study, but is acquired through some other means. If such be the case, how can ability to respond aesthetically to a diversity of music be taught?

No study to date has compared aesthetic responses to a musical work among those who had previously participated in the work's performance and those who had no such participation experience. An investigation of those who through practice and performance become keenly aware of musical content may yield differences in aesthetic response.

Thus I embarked upon an initial investigation intending to compare (a) aesthetic responses of participants in a choral music ensemble to an excerpt from a musical work, which they had performed and recorded, with (b) the responses of those who were not members of the ensemble and had not participated in a performance of that particular work.

## METHOD

Respondents ( $N=60$ ) included members of a collegiate women's choral ensemble at a large university ( $n=30$ ) and students from undergraduate introductory music courses at the same university ( $n=30$ ). Although both courses enrolled a larger number of students, data were obtained from the first thirty students from each group to volunteer. Only four music majors participated in the investigation. These students were members of the performing choral ensemble.

All respondents listened to a selected 2 min 17 second excerpt from a choral performance of two sequential movements of Benjamin Britten's *A Ceremony of Carols* ("As Dew in Aprille" and "This Little Babe"). The excerpt was taken from a performance in which half of the respondents had participated.

Fast tempi - a music element found to elicit higher preference ratings when compared to slower tempi (LeBlanc & McCrary, 1983)—and moderately loud/loud dynamics were the primary expressive elements. Though this composition for women's chorus is often performed with piano, this performance included harp as preferentially indicated by the composer. During the live performance a recording was made using two Equitec 200 microphones connected to a digital audio tape recording device and simultaneously transferred to a Maxwell XLII IEC Type II cassette tape.

All respondents simultaneously listened and manipulated a pointer on a Continuous Response Digital Interface (CRDI) dial corresponding to their "aesthetic" response (right—positive; left—negative). As respondents individually entered the listening area they were instructed as follows:

You are going to hear an excerpt from a live recording of [your] a choral concert. As you listen, move the pointer on the dial corresponding to your aesthetic response to the music. [Please respond to your aesthetic feeling for the music rather than your feeling for accuracy of the performance.] Do you have any questions?"

Following the instructions, the investigator—also conductor of the recorded chorus—explained dial movements to the subjects and answered any questions.

Participants listened to the musical stimuli using stereo headphones connected to a Pioneer SX-201 stereo receiver and Pioneer CT-S502R cassette deck. Intensity and balance levels were preset at a comfortable level. A personal computer was used to collect data from the CRDI dial connected to an 8-bit analog to digital converter (Acqutek PA-CP12), which transformed voltage (0-5 volts) from the CRDI dial potentiometer into digital format with a scale ranging from 0-256. Each listening example was sampled once per second. There was no interaction with respondents during the running of the stimulus. Distance between the investigator and respondents during listening was maximized.

RESULTS

To make comparisons, listening segments were divided into 11 equal time intervals of 12.5 seconds. Intervals one through the first seven measures of Interval five included the fifth movement with several seconds of applause prior to and between movements. The remaining intervals, the last six measures of 5 through 11, comprised of the sixth movement. Means and standard deviation for each interval were calculated as shown in Table 1.

Mean differences for each interval were analyzed using a 2 (Performance Status) x 11 (Time Interval) mixed-model repeated measures analysis of variance. A significant performance main effect emerged from this analysis,  $F(1, 58) = 18.53, p < .001$ . Ratings of participants in the performer group were significantly higher ( $M = 195.67, SD = 29.97$ ) than those of their counterparts in the non-performer condition ( $M = 156.17, SD = 38.23$ ).

A performance by time interaction was also revealed,  $F(10, 58) = 2.63, p < .01$ . To explore this interaction, simple main effects for time were examined for each of the two performance conditions. Results indicated that participants in the performer group significantly changed their ratings across time,  $F(10, 29) = 2.95, p < .001$ , whereas their counterparts in the non-participant condition did not,  $F(10, 29) = 1.70, p = ns$ . Non-performance participants tended to have lower, relatively stable ratings across the eleven intervals. These participants responded more actively and their responses remained relatively stable for the initial six intervals. They then reported increasingly intense ratings as Interval 9 approached. Mean contrasts at each interval were also examined adjusting alpha to

.001 to control for the number of analyses conducted. Significant ratings differences were found for Intervals 1, 7, 8, 9, and 10, supporting the notion that performers experienced a heightened aesthetic experience during those time periods.

Table 1

*Participant and Non-Participant Mean Scores for 12.5 second Time Intervals*

Interval	Participants		Non-Participants	
	M	SD	M	SD
1	185.93	36.83	140.00	43.59
2	187.43	42.79	156.07	54.22
3	191.47	38.94	161.90	54.21
4	198.20	44.07	168.60	43.69
5	191.43	40.12	172.00	44.82
6	181.90	52.90	165.37	42.03
7	195.13	39.13	153.86	52.34
8	204.43	32.38	153.30	54.76
9	212.27	27.46	150.27	60.39
10	205.83	39.10	153.47	60.18
11	197.67	51.10	160.93	57.57

DISCUSSION

Though initial responses of performer-participants were higher than those of non-performer respondents, response patterns were similar for both groups during the first half of the listening experience. However, a marked contrast in responses occurred during the last portion of the recording - movement #6 ("This Little Babe").

At the point of ratings diversion (Interval 6), musical content becomes more complex with fast tempo, repetitive choral accompaniment figures, loud dynamics, and incrementally more complicated

text placement where canon form is used (each of the three parts eventually enters after each beat). For performer-participants, the peak aesthetic feeling apparently occurred during Interval 9 where homophonic text placement returns following the fast, canonic treatment. During this same interval (9), non-performer respondents recorded their second lowest rating - only slightly higher than Interval 1 rating.

Walker (1981) proposed that listeners may indicate a greater liking as compositions become more structurally complex, then demonstrate less liking as complexity increases. Such a phenomenon may have influenced the ratings of this study's non-performer respondents. As performer-participants increased their rating during the same time intervals, perhaps, for these participants, the degree of aesthetic response to complexity in music was increased by their prior performance involvement and score comprehension.

Such a result contradicts findings from test-retest situations of musicians versus non-musicians where all subjects responded similarly at the same points in music even after extended periods of time (Madsen, 1999). One can speculate – based on the results of the present study – that had musicians in the Madsen study evaluated their own performance a differing response may have been elicited.

Review of the raw data revealed that 11 of the respondents “rested” for a period of time on one end of the dial. Of the 30 performer participants, seven rested on the highest positive position for time periods ranging from 9 to 77 seconds. Only one of the non-performers rested on the most negative position - during the initial 12 seconds of listening. The remaining three respondents “rested” positively for periods of 17, 51, and 56 seconds. All respondents remained focused and demonstrated discrimination in their responses as in previous CRDI studies where none of the participants set the dial for the entire listening experience (Madsen, 1999).

Caution is warranted in generalizing findings from this study for several reasons. First, as the ensemble conductor was also the investigator, this dual role may have interfered with participants' responses. It is important to note, however, that no participants were individually identified and that participants appeared to use the dial both positively and negatively, perhaps indicating a lack of restraint in their responses. Secondly, this study included a very short excerpt with limited musical elements. As an initial investigation of performance participation as a variable affecting aesthetic response, these results indicate that personal involvement may affect

the degree and scope of aesthetic response. Further investigation is warranted.

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