

A Locational Study of R. Murray Schafer's *Music for Wilderness Lake* [1979]

By Sarah Teetsel

Abstract

Music for Wilderness Lake [1979] was a pioneering composition in the development of Canadian composer R. Murray Schafer's (1933–2021) environmental works. Envisioned as a performance for twelve trombones gathered around Southern Ontario's O'Grady Lake, it continuously evolved as the realities of the outdoor location shaped the compositional process and the premiere performance. Schafer was prompted to think about how an outdoor, rural location affects musical performances and what concessions it required. Despite the significant role *Music for Wilderness Lake* played in Schafer's compositional output, it is too often scripted as a first step to his later environmental works.

In this article, the author recontextualizes *Music for Wilderness Lake* by exploring the experimentation that took place as Schafer's vision was adapted to performance and logistical challenges. One of the unique features of *Music for Wilderness Lake* is the use of a central raft on a lake, from which Schafer cued the full ensemble during the premiere. By examining the performance site, this article highlights how some of the aspects of the location that Schafer found exciting—wide spatialization of performing forces and lively echoes—affected the development of *Music for Wilderness Lake*. Using contemporaneous articles (Littler 1979, MacMillan 1979, and Sweete 1980); interviews (including Westerkamp 1981); sketches of the location; and the film made of the performance (*Music for Wilderness Lake*, 1980, Fichman-Sweete Productions); this article explores why O'Grady Lake was chosen for the premiere and how the space helped develop specific relationships among participants based on spatialization and instrumental groupings.

Article

The image containing the widest variety of participants at the premiere performance of *Music for Wilderness Lake* [1979] might be Figure 1, taken from the film of this occasion, *Music for Wilderness*

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Lake [1980, Fichman-Sweete Productions].¹ From the left, the composer and conductor, R. Murray Schafer (1933–2021), turns a page of the score. Dressed all in black next to him is Jean Schafer, Murray’s wife at the time, holding all the coloured flags used to communicate section changes in the music. The seated figures are most likely all recording staff, as this performance was recorded for film (by Fichman-Sweete Productions, later known as Rhombus Media) and radio broadcast (by the Canadian Broadcasting Corporation [CBC]). The central gentleman in the light-coloured jacket, seated behind the Schafers, is music producer John Reeves, who worked for the CBC. In the film, Reeves introduces the item on the far-right side of the raft, which looks like a black-coloured head on a stand, as a *Kunstkopf* device.



FIGURE 1. “CENTRAL RAFT,” IN *MUSIC FOR WILDERNESS LAKE*, DIRECTED BY NIV FICHMAN AND BARBARA WILLIS SWEETE (OLEY, PA: FICHMAN-SWEETE PRODUCTIONS, 1980), DVD, 29 MIN. REPRODUCED WITH PERMISSION.

The “*Kunstkopf*” (“artificial head”) was developed in Germany and was first presented publicly at Berlin’s *Internationale Rundfunkausstellung* (International Radiocommunications Fair) in 1973 (see Figure 2).² Also known as a “dummy head system,” the basic concept of binaural recording has remained the same through each generation of devices to the present day. Two microphones are placed approximately in the ear canals of a faux human head. The advantage of this recording

¹ At the time of writing, the film is available for purchase through the educational film distribution company, Bullfrog Films. “*Music for Wilderness Lake*,” Bullfrog Films, accessed April 28, 2025, <http://www.bullfrogfilms.com/catalog/lake.html>.

² Stephan Paul, “Binaural Recording Technology: A Historical Review and Possible Future Developments,” *Acta Acustica United with Acustica* 95 (2009): 775.



FIGURE 2. “KUNSTKOPF MICROPHONE,” IN *MUSIC FOR WILDERNESS LAKE*, DIRECTED BY NIV FICHMAN AND BARBARA WILLIS SWEETE (OLEY, PA: FICHMAN-SWEETE PRODUCTIONS, 1980), DVD, 29 MIN. REPRODUCED WITH PERMISSION.

system is that it mimics a human’s perception of sound, which occurs 360° around the listener’s body. The resultant recording is intended to provide the best listening experience when projected over loudspeakers or listened to through headphones, creating a “lived experience” for the audience, as if they were actually there at the moment of performance.³ This setup would allow the listener of the recording a privileged experience, as if they had been on the raft themselves. They would not be just an audience member, but on the podium (so to speak), next to the conductor, surrounded both by the twelve trombones that are performing the composed music from the lakeshore and the natural environment that echoes back the musical phrases.

Figure 1 showcases a variety of participants involved in this premiere performance: contributors who would help determine the contents of the musical score, and in the case of the *Kunstkopf* device, a stand-in for a listening audience member. While the required instrumentalists are not visible, we see the composer, members of recording crews for film and radio broadcasts, and additional volunteers, such as Jean Schafer.⁴ All these figures are on a large raft against a backdrop of a murky, foggy lake. In this article, I want to bring the background into the foreground, focusing on the raft and the lake. These specific elements

influenced the development of *Music for Wilderness Lake*, both the musical composition and the film. I argue that details regarding everyone’s location at the premiere provide context to discuss the location’s material aspects, both physical and acoustic, because topographical nuances of the landscape and incidental features of the lake helped develop the musical composition. For example, as will be shown, without the raft on which the people stand in Figure 1, what evolved to become *Music for Wilderness Lake* might not exist. The raft enabled a site-specific composition that uses the acoustics and spatial features of the lake—one of many ways in which the environment influenced Schafer’s compositional strategy for this piece.

³ Georg Neumann GmbH, “The Dummy Head—Theory and Practice,” *Neumann Berlin* [1988?]: 3, 5-6; See also Stephen Adams, *R. Murray Schafer* (Toronto: University of Toronto Press, 1983), 181.

⁴ The ensemble that premiered *Music for Wilderness Lake* was the young trombone collective Sonaré. It was active between 1976 and 1980 and consisted of mostly college-aged trombonists. R. Murray Schafer, *My Life on Earth & Elsewhere* (Erin, ON: Porcupine’s Quill, 2012), 151; Dan Gallant, email message to author, June 25, 2019; and Kirk Loren MacKenzie, “Influences of *Soundscape* Theory on the Compositions of R. Murray Schafer” (MM thesis, University of Cincinnati, College-Conservatory of Music, December 1988), 95. The score of *Music for Wilderness Lake* is dedicated to the twelve trombonists involved in the premiere performance. An account of Sonaré’s involvement and contribution to *Music for Wilderness Lake* is beyond the scope of this article, but can be found in Teetsel, “A Historical Chronology of *Music for Wilderness Lake*,” chap. 1 of. “Confrontation and Confluence,” 22-57.

Music for Wilderness Lake catalyzed Schafer's transition from indoor to outdoor performance and is frequently cited as one of Schafer's first or earliest environmental works.⁵ His magnum opus is widely considered to be his twelve-part *Patria* cycle (begun in 1966).⁶ Although *Music for Wilderness Lake* is not part of this cycle, this smaller work was, for Schafer, a spark of inspiration for bigger and grander environmental works in the future, and *Music for Wilderness Lake* allows me to consider some of the issues raised by the *Patria* cycle on a more manageable scale.⁷ In general, Schafer would be prompted during the creation process of *Music for Wilderness Lake* to think about how an outdoor, rural location can affect musical performances, what concessions may be needed when recording in such a setting, and how he might use bodies of water in some of his future compositions.⁸

I begin by discussing the process by which O'Grady Lake was chosen as the premiere location. Further discussion will touch upon the physical location of O'Grady Lake and how its unique features, such as the aforementioned raft, contributed to the development of *Music for Wilderness Lake*. Because this raft was a pre-existing feature of O'Grady Lake, it became a significant factor in the development of *Music for Wilderness Lake*; the score was written in full only after the location had been decided. I explore why the performance location was chosen, its acoustic qualities, and how the space helped develop particular relationships among participants based on spatialization and instrumental groupings. I also speculate on the significance of echoes as indicators of vitality in an outdoor environment. I argue that the peculiarities of *Music for Wilderness Lake* can be understood only by considering the premiere location as integral to the work. Using real images, Google Earth, and sketches of the lake, I can determine *a posteriori* the location of the premiere participants. Mapping participants' locations on this lake helps the experience of being on location for the premiere event to come to life, placing readers and listeners at the centre of the event.

Premiering *Music for Wilderness Lake* at O'Grady Lake was the result of criteria set by Schafer and the recording crews, yet the lake's features both constrained and enhanced the performance. Film

⁵ Schafer, *My Life on Earth*; Lev Bratishenko, "144 Singers in 20 Boats in Central Park," *Maclean's* 126, no. 24 (June 15, 2013), <https://macleans.ca/culture/144-singers-in-20-boats-in-central-park/>; Brooke Dufton, "A Voice in the Wilderness: A Singer's Guide to the Implications of Performance Context in R. Murray Schafer's *Wolf Music*" (DMA thesis, University of Toronto, 2018); Kathleen Anne Galloway, "'Sounding Nature, Sounding Place': Alternative Performance Spaces, Participatory Experience, and Ritual Performance in R. Murray Schafer's *Patria* Cycle" (PhD thesis, University of Toronto, 2010); MacKenzie, "Influences of *Soundscape* Theory;" and Robert Rowat, "R. Murray Schafer, Composer, Writer and Acoustic Ecologist, has Died at 88," CBC Music, last updated August 15, 2021, <https://www.cbc.ca/music/r-murray-schafer-composer-writer-and-acoustic-ecologist-has-died-at-88-1.5404868>.

⁶ For more on the *Patria* cycle, see especially R. Murray Schafer, *Patria: The Complete Cycle* (Toronto: Coach House books, 2002); and *Canadian Encyclopedia*, s.v. "*Patria*," by Kirk Mackenzie, Historica Canada, last edited December 16, 2013, <https://www.thecanadianencyclopedia.ca/en/article/patria-emc>.

⁷ Jonathan Gilmurray, "Introduction," in *Environmental Sound Artists: In Their Own Words*, eds. Frederick Bianchi and V.J. Manzo (New York: Oxford University Press, 2016), xxiv.

⁸ Prior to *Music for Wilderness Lake*, Schafer used recorded environmental matter as compositional material during his work with the World Soundscape Project (1965-1975), but further discussion of this subject is outside the scope of this article.

director Barbara Willis Sweete details the criteria by which the location was chosen and enumerates the specific qualities for which they searched.

A part of our collaboration with Murray [Schafer] was to find the appropriate wilderness lake. This was no easy task as most of the lakes which were accessible by road were lined with summer cottages. In addition, the lake had to be small enough that the players could see each other on the opposite shore, it had to be surrounded by hills so that the echo effects in the piece would be foregrounded, and it had to be generally beautiful for the sake of the overall visual quality of the film. With the aid of some local fishermen and trappers near Murray's home north of Bancroft, Ontario, we explored five lakes by canoe, and after extensive testing, decided on O'Grady Lake. From then on, both the film and the score developed with this specific lake in mind.⁹

As Sweete describes, the location for the premiere of *Music for Wilderness Lake* needed to have 1) road access, 2) general visual beauty for film interest, 3) surrounding hills for prominent echoes, and 4) a proper size. The lake selected for the performance needed to be large enough to allow for echoes, yet small enough that the trombonists could see each other and the conductor from their positions.

While Schafer may have planned some portions of the music in advance, the whole composition only solidified after he saw and heard the features of the performance space. After the location had been chosen in early August 1979, Schafer wrote the score for the premiere in just under four weeks, sending it to the trombonists about two weeks before the performance on 22 September 1979. *Music for Wilderness Lake* was written to be premiered at O'Grady Lake, approximately ten miles from the Schafers' home.¹⁰ Although five lakes were considered by the film crew and Schafer, only two are discussed by name in the extant literature. O'Grady Lake was chosen in preference to the smaller Madawaska Lake, avoiding the longer two-hour drive.¹¹ Musicologist Kirk Loren MacKenzie explains that aesthetics affected the final decision: "O'Grady Lake was chosen by Schafer and the filmmakers over Madawaska Lake both for acoustical and visual reasons. O'Grady was the more beautiful of the two lakes, and acoustically [. . .] the combined effect of the surrounding hills and hardwood trees on some of these hills created brilliant multiple echoes."¹²

With the decision made that O'Grady Lake would be the performance venue, it became clear during the preparatory planning that the aesthetic and acoustic qualities MacKenzie identifies are influenced by both the time of day and geographic features. These environmental features determined the placement and spatialization of performing forces both at the premiere

⁹ Barbara Sweete, "The Experience of Music for Wilderness Lake," *Newsletter Called Fred: Ontario Film Association* 9, no.1 (September 1980): 5.

¹⁰ Hildegard Westerkamp, "Wilderness Lake," *Musicworks* 15 (Spring 1981): 20. O'Grady Lake is twenty-five miles north of Bancroft or about two and a half hours due west of Ottawa.

¹¹ Sweete, "Experience of Music," 5. O'Grady Lake is about a twenty-minute drive from the Schafers' home.

¹² MacKenzie, "Influences of Soundscape Theory," 103.

performance and in the filmed recording. Subsequent performances would recreate similar performance spatializations in new environments. According to my research, *MFWL* has been performed eleven other times after the premiere in different locations, with most of these performances taking place in urban parks.¹³ Further discussion of these performances and their locations, however, is outside the scope of this article.

One of the other unique features of O'Grady Lake at the time of the premiere was the raft, as pictured in the centre of Figure 1, which was fixed in place prior to the performance.¹⁴ It is unknown today if Madawaska Lake had a raft similar to the one on O'Grady Lake. It is possible that, had O'Grady Lake not been chosen for the premiere, another type of central floating watercraft would have sufficed in alternative locations, as indeed would be the case in later performances of *Music for Wilderness Lake*. The original purpose of the raft on O'Grady Lake was most likely for fishing. Schafer (MS) comments in an interview with composer Hildegard Westerkamp (HW) that, "It is a fishing lake."

MS: The lake is about ten miles away from where I live and probably twenty miles from the nearest village.

HW: Does the lake play a role at all for the people in the area as a recreational lake, for example, or a fishing lake?

MS: It is a fishing lake. Farmers know where it is and use it. When I asked them for a lake that might be suitable for such a piece, they told me about it.

HW: How well did you know the lake before you started the piece?

MS: I knew the lake for at least a year. By canoeing there at different times of day, I discovered that the piece would require a fair amount of logistic planning. For instance, there were marshes and swamps at one end of the lake and some rather steep hills on several other sides. It was very hard to determine where to situate twelve performers so that they had enough room for their music stands and could also see the centre of the lake.¹⁵

¹³ See Wiesbaden, Germany (prior to 2012); Holland Festival, Amsterdam, Holland (1984); Scotia Festival, Halifax, NS (1993); Living with Lakes, Sudbury, ON (October 4, 2008); Make Music New York, Central Park Lake, NY (June 21, 2013); Nuit Blanche North, Huntsville, ON (July 13, 2013); Stratford Summer Music Festival, Stratford, ON (July 19-21, 2013); Contemporary Austin Sound Series, Austin, TX (June 27-28, 2014); Kalvfestivalen, Gothenburg, Sweden (2015); Living with Lakes, Sudbury, ON (July 1, 2016); and Society for New Music Season Opening Concert, Syracuse, NY (September 4-5, 2021). Some of these performances may have been either been selections (i.e., one movement only) or out of order (i.e., playing Dawn and then Dusk later that same day).

¹⁴ A survey of extant material thus far has yielded no logistical information regarding the raft's origins.

¹⁵ Westerkamp, "Wilderness Lake," 20. It is not clear if Schafer was intimately familiar with the lake before he started his search for a performance location.

Because Schafer had only recently moved to the area, he needed to rely on local knowledge to aid in his search for the ideal performance location, though it is unclear from the historical record if these farmers suggested all five of the lakes that Schafer explored with Sweete and the recording crews. It is also unclear whether Schafer knew of the location before he asked for help, or if he only began exploring local lakes in earnest after others suggested them. When I interviewed Sweete via Skype, she estimated the raft's size to be about ten feet by twelve feet.¹⁶ The raft no longer appears to be a feature of O'Grady Lake, because no images of it appear on Google Earth from 2013, 2015, or 2021 (see Figure 3) nor in a realtor video advertising the lake in 2018, suggesting that it has been dismantled or otherwise has disappeared.¹⁷ The Figure 3 image of O'Grady Lake on a December day showcases a snowy landscape, rather than the colourful fall foliage that would be present in September during the premiere. This fact highlights the fluid nature of the landscape, a reminder that as seasons and foliage change, so do acoustics.



FIGURE 3. LANDSAT COPERNICUS, "SATELLITE VIEW OF O'GRADY LAKE," GOOGLE EARTH, GOOGLE, DECEMBER 16, 2021, ACCESSED FEBRUARY 6, 2025, https://earth.google.com/web/@45.28002123,-77.70349679,334.21933318a,39071.62069118d,1y,-0h,0t,0r/data=CGWQBggBEGAYAUICCAE6AwoBMEICCBKDQJ_____8BEAA. REPRODUCED WITH PERMISSION.

¹⁶ Barbara Willis Sweete, Skype interview with author, June 26, 2020.

¹⁷ Rob Serediuk, "O'Grady Lake," YouTube, posted July 19, 2018, <https://www.youtube.com/watch?v=MQOd2quRrnY>. I was unsuccessful in contacting the individual realtor or the company for more details about this location. Earlier Google Earth images of O'Grady Lake include ones taken on December 1985 and May 2004, which also do not show any indication of the raft, but the lower resolution and quality of these images may obscure such a minute detail.

Compare Schafer's description of O'Grady Lake in the quoted interview above with the aerial image in Figure 3. The "marshes and swamps" that Schafer identifies are likely in the northernmost area of the lake, visible on the map in the brown areas in the upper left of Figure 3. The "steep hills on several other sides" may be referencing the southeastern half of the lake, which was not used during the premiere. One hill on the westernmost side of the lake became known as "Publicity Point," according to production manager Larry Weinstein.¹⁸ The audience gathered there during the premiere consisted of Weinstein, local residents who assisted during the production, and invited journalists and reporters, among them the editor of *Music Magazine*, Ulla Colgrass, music critic William Littler of the *Toronto Star*, and reporter Rick MacMillan for *Sound Canada*, as evident in their writings on the event.¹⁹

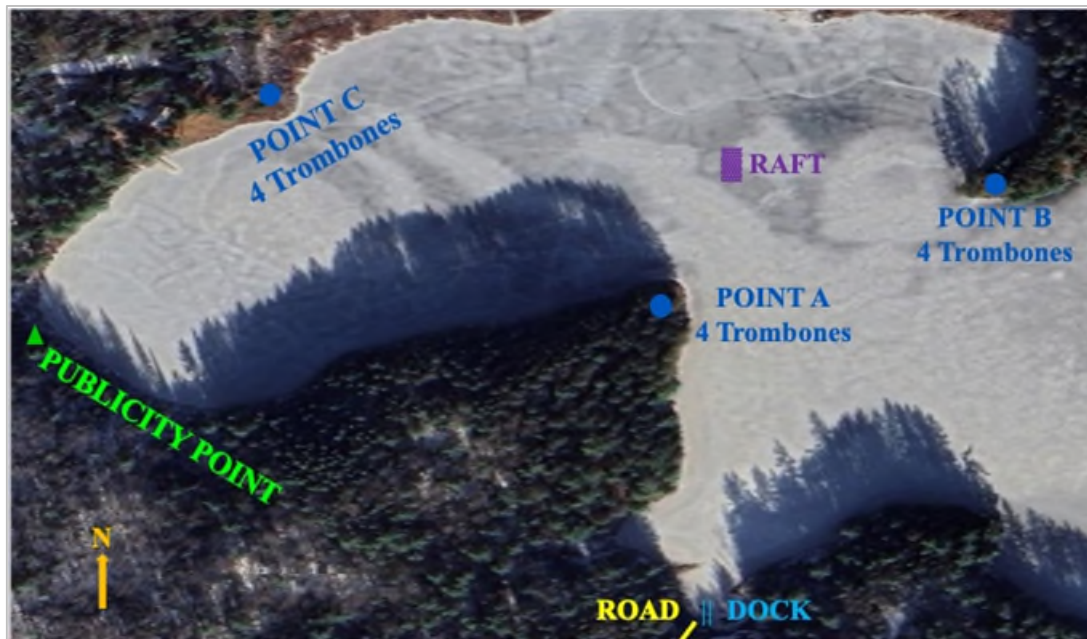


FIGURE 4. LABELLED MAP OF PREMIERE PERFORMANCE SPACE FOR MUSIC FOR WILDERNESS LAKE ON O'GRADY LAKE.

Figure 4 shows the southwestern portion of O'Grady Lake, which was used during the premiere performance. The labelled positions were confirmed by Sweete during our Skype interview.²⁰ There is only one road, leading south from the shore near the middle of the lake near a dock. Points A, B, and C are the locations of the three groups of trombones. Points A and C were also the locations of

¹⁸ Larry Weinstein, phone interview with author, July 13, 2020.

¹⁹ Ulla Colgrass, "Murray Schafer," *Music Magazine* (January/February 1980): 17-23; William Littler, "Schafer: Composing What Comes Naturally," *Toronto Star*, October 13, 1979; and Rick MacMillan, "R. Murray Schafer and 'The Music of Man'—Outdoors," *Sound Canada* (December 1979): 8-12.

²⁰ All labels are approximately positioned and should not be considered as exact locations, especially the raft and the dock.

the film directors, Sweete and Fichman, respectively, from which they were able to quietly direct the recordists during the performance.²¹

A drawing printed as part of Sweete's article, "The Experience of *Music for Wilderness Lake*," (1980) shows the placement of the majority of participants at the lake (see Figure 5).²² There were at least three boats and three canoes used during the premiere, represented in Figure 5 as the free-floating cameras and microphones, respectively.²³ "Sound 4," the only attached microphone, represents the microphone positioned on the central raft. The boats ferried participants into position before recording because there are no paths around the lake.²⁴ Additional cameras include "Camera 2" on the Point A peninsula and a fifth camera which freely roamed the southern lakeshore (located in the upper left quadrant of Figure 5) to capture the responses of local wildlife.²⁵ If Figure 5 was rotated 45° counterclockwise, it would match the orientation of the Google Earth images in Figures 3 and 4. The placement of the dock at the bottom of Figure 5 is inaccurate; it should be located on the southern shore (the left side of the image), below the Point A trombone peninsula.

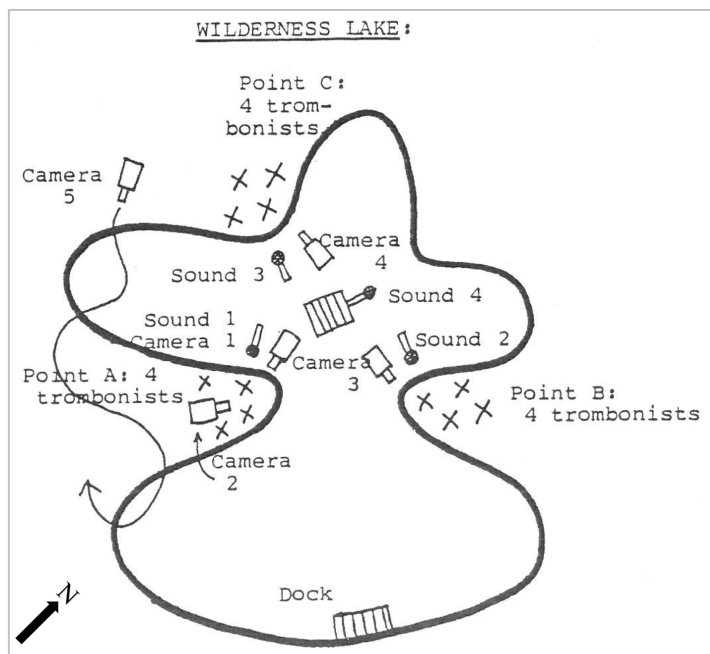


FIGURE 5. BARBARA SWEETE, "WILDERNESS LAKE," IN "THE EXPERIENCE OF MUSIC FOR WILDERNESS LAKE." NEWSLETTER CALLED FRED: ONTARIO FILM ASSOCIATION 9, NO. 1 (SEPTEMBER 1980): 6. REPRODUCED WITH PERMISSION.

²¹ Barbara Willis Sweete, Skype interview with author, June 26, 2020.

²² Sweete, "Experience of *Music*," 6. This drawing is similar to a drawing found in the Schafer Archives and also printed in an article by Westerkamp. "Wilderness Lake," R. Murray Schafer Papers, MUS 85 1977-7 M-V, folder 10, National Archives of Canada, Ottawa; and Westerkamp, "Wilderness Lake," 20.

²³ Sweete, "Experience of *Music*," 5.

²⁴ R. Murray Schafer, "Composer's Notes," in *Music for Wilderness Lake* (Bancroft, ON: Arcana Editions, 1981), iv.

²⁵ Sweete, "Experience of *Music*," 6. This fifth camera is not present in the drawing held by the Schafer Archives nor in the print in Westerkamp's article.

Schafer had not always envisioned the instruments on the lakeshore grouped at three points. The detailed sketches of Madawaska and O'Grady Lakes he made, most likely on location during the test sessions on 7 and 8 August 1979, had the trombonists more equally spaced around the shore.²⁶ On 6 September 1979, Schafer sent both the score of the first movement of *Music for Wilderness Lake*, "Dusk," and an instructional letter to the trombonists containing a drawing in which the instruments are spaced more or less equidistant around the lakeshore.²⁷ In this letter, Schafer also wrote that "your nearest neighbour may be 50 yards away."²⁸ The placement of trombones at specific points around a lakeshore bears some resemblance to Schafer's later recollection of his days as a sailor: "In those days, the navigator plotted the course of the ship by listening to radio signals from transmitters at different points around the lake."²⁹ With this in mind, although Schafer himself never expressed this parallel, the conductor on the raft can be likened to the captain of a ship navigating by trombone signals, even if the "ship" in this analogy was fixed in place.



FIGURE 6. "TWO TROMBONISTS DURING 'DAWN,'" IN *MUSIC FOR WILDERNESS LAKE*, DIRECTED BY NIV FICHMAN AND BARBARA WILLIS SWEETE (OLEY, PA: FICHMAN-SWEETE PRODUCTIONS, 1980), DVD, 29 MIN. REPRODUCED WITH PERMISSION.

Having determined Schafer's initial plan for the placement of the trombonists, the question remains: when and why did the change from even spatialization to groups of four at three specific points (A, B, and C in Figure 5) take place? The answer is rather prosaic—Schafer conceded to three groupings at the request of the film crew in order to reduce the number of cameras needed.³⁰ This requested change occurred sometime after September 6, about two weeks before the performance.³¹ I suspect that the two prominent peninsulas jutting into O'Grady Lake helped determine the locations of the groups, although there is no information in the extant written material to explain why they ended up in these precise locations. These physical features may also explain

why there are no indicated sightlines in Schafer's sketches of O'Grady Lake, in contrast to those of

²⁶ R. Murray Schafer, "Madawaska Lake Sketch," R. Murray Schafer Papers, MUS 85 1977-7 24, box M-V, folder 10, National Archives of Canada, Ottawa; and R. Murray Schafer, "O'Grady Lake Sketch," R. Murray Schafer Papers, MUS 85 1977-7 24, box M-V, folder 10, National Archives of Canada, Ottawa.

²⁷ R. Murray Schafer [to Sonaré trombonists], September 6, 1979, R. Murray Schafer Papers, MUS 85 1977-7 24 M-V, folder 11, p. 1, National Archives of Canada, Ottawa. In this letter, Schafer reports that the second movement, "Dawn," would follow a few days later, "as soon as I can copy it out."

²⁸ Schafer, 1.

²⁹ Schafer, *My Life on Earth*, 33.

³⁰ Schafer, "Composer's Notes," in *Music for Wilderness Lake*, iii-iv.

³¹ Schafer [to Sonaré trombonists], September 6, 1979, 1.

Madawaska Lake. During the premiere, the trombonists within each group were fairly close to one another, perhaps only a few feet away, as shown in Figure 6, taken from the film.

The *Music for Wilderness Lake* premiere built upon Schafer's growing understanding of the interplay of sound and water. Schafer realized that as he canoed across "the many unpeopled lakes in the Madawaska area," the qualities of sound over water were affected by the time of day.³² He would later come to understand that this phenomenon was due to refraction, sound traveling at different speeds based on air temperature.³³ Bodies of water naturally magnify sound because of the temperature gradient above the water's surface. Air is cooler closer to the water's surface, and sound travelling across the lake is refracted against the warmer air, resulting in more direct sound waves reaching a listener on the opposite shore.³⁴ The surface texture of a body of water also affects sound. A smooth, undisturbed surface allows for greater sound wave reflection. In general, bodies of water are calmer at night because the air above land and the air above water are the same temperature. During the day, the ground heats more quickly than the water, resulting in a temperature and pressure differential that creates wind, which breaks up the water's surface. This means that the best times of day for sound to travel across water are dawn and dusk, when there is little difference in temperature between the air and water, and there is enough light by which to see. Because the sound at this location was considered best at these two times of day, the work was eventually written in two movements. Capitalizing on the time of day would become a recurring feature in Schafer's later environmental works, including *Patria Prologue: The Princess of the Stars* (1981), which begins 52 minutes before dawn so that the sun rises while a character known as the Sun Disc enters.³⁵

Another important quality of the performance location was the character of the echoes created by the topography around the lake:

The countryside is gently rolling with small hills. As a result, you get very different echoes than you would get in British Columbia, for example. The sound does not disappear into the great distance as it would in the mountains. In this landscape, the echoes are immediate

³² Schafer, *My Life on Earth*, 151. "I had been canoeing around one of the many unpeopled lakes in the Madawaska area and had noticed how the sounds changed throughout the day and evening. I decided to write a work for the lake and take advantage of those changes." When precisely this exploration and decision took place is not recorded in the extant literature. It may have been right after Schafer moved to the area from Vancouver in 1975, or after Schafer was contacted by Sonaré, the trombone ensemble who premiered *Music for Wilderness Lake*, looking for a commission in 1977.

³³ See Schafer, "Composer's Notes," in *Music for Wilderness Lake* (Bancroft, ON: Arcana Editions, 1981), ii.

³⁴ See also Littler, "Schafer: Composing What Comes."

³⁵ R. Murray Schafer, *Patria: The Prologue: The Princess of the Stars* (Toronto: Arcana Editions, 1986), 5.

and multiple, bouncing off the rock surfaces or the hardwood forests that surround the lake.³⁶

Contrast Schafer's spatial perceptions of this outdoor location with historian Emily Thompson's description of modern, indoor soundscapes, where sound without reverberation reflects "the efficiency of the space in which it was heard."³⁷ If echoes are perceived by listeners in indoor spaces as markers of "inefficiency," what value might echoes have within a concert hall? If the historical references highlighted by architect Michael Forsyth about avoiding echoes are any indication, echoes have long been undesirable in traditional musical spaces.³⁸

Reverberance and echoes are also indicators of the "liveness" or "deadness" of a space. In the passage above, Schafer is describing a liveness of sound evident through prominent echoes. In other words, the "inefficient" echoes of the outdoor spaces that Schafer describes connote liveness. Not only is the space considered more alive with echoes, but the echoes themselves may also have a sense of life, as sonic artist and theorist Brandon LaBelle explains:

The echo is an auditory mirror returning to the original sound event its own sounding image; the echo *speaks back* and in doing so seems to replace the original with a doubling whose animating presence takes on a life of its own. The echo comes to stand in space, as a figure whose shape and dimension remains unsteady but whose meaning suggests an ambiguous field of signification: every echo seems to *come alive*.³⁹

In the way that LaBelle describes, it is the liveness of echoes that Schafer was listening for when he described how "the performers need to interact with the environment, relaxing at the places indicated to allow it to sing back to them."⁴⁰

Nature is allowed to "sing back" in the score. In the "List of Signs" on the first page of the score, Schafer includes two different fermatas. The first is a conventional rounded fermata, representing "a normal pause to allow the echo to die away completely."⁴¹ The second symbol is a square fermata, which is "a long pause to allow the natural sounds to be heard before the music

³⁶ R. Murray Schafer, quoted in Westerkamp, "Wilderness Lake," 20.

³⁷ Emily Thompson, *The Soundscape of Modernity: Architectural Acoustics and the Culture of Listening in America, 1900-1933* (Cambridge: MIT Press, 2002), 171.

³⁸ See Michael Forsyth, *Buildings for Music: The Architect, the Musician, and the Listener from the Seventeenth Century to the Present Day* (Cambridge: MIT Press, 1985), 22, 94, 156, 158-59, 238, 239, 245, 260. For more on the time length and spatial distance of perceivable echoes, see Dorothea Baumann, *Music and Space: A Systematic and Historical Investigation into the Impact of Architectural Acoustics on Performance Practice Followed by a Study of Handel's Messiah* (Bern: Peter Lang, 2011), 78-79.

³⁹ Brandon LaBelle, *Acoustic Territories: Sound Culture and Everyday Life* (New York: Continuum, 2010), 14. Emphasis in original.

⁴⁰ Schafer, "Composer's Notes," in *Music for Wilderness Lake*, iii.

⁴¹ Schafer, "List of Signs Employed," in *Music for Wilderness Lake*, 1.

resumes.”⁴² This second fermata explicitly incorporates the sounds of the natural environment. It is in these kinds of pauses that Colgrass heard birds “take their cues with uncanny precision,” accompanied by “rustling leaves and fish making small splashing sounds,” suggesting that the surrounding environment and animals are part of the musical ensemble.⁴³

In the film, Schafer said, “You play to the water and you play to the trees, and then you listen for the trees and water to play back to you.”⁴⁴ In one sense, natural features like water and trees are anthropomorphized as performers in the composition, producing new musical material with their echoes and reverberation. The phrase “to play back,” however, has another resonance in an age of recorded sound—it is commonly used in contexts where something is repeated *verbatim*. To play something back allows distance between the act of creation and the acts of listening and reflection. In this regard, there is something of a mechanical quality to how the geographic features respond to the sound, if it can even be said that they are alive and able to respond at all.

These understandings of what is “alive” in terms of playing back sound are further complicated by a device used in the recording of *Music for Wilderness Lake*, the *Kunstkopf* recording device. Given the human shape of the *Kunstkopf* device, these devices are frequently given human nicknames by their users, particularly those involved in musical composition.⁴⁵ It is identified in the film as “my friend, Arthur Tate,” by John Reeves.⁴⁶ Although “Arthur Tate” may have given listeners a privileged seat at the centre of the action during *Music for Wilderness Lake*, the radio and film broadcasts provided listeners with a “better than live” perspective by mixing the various recorded tracks.⁴⁷ The unique opportunity to be on the raft with the composer himself was ultimately deemed not as “interesting” by the recording mixers as what could be heard through the combination of more targeted recording methods. In the end, “Arthur Tate” was only a partial stand-in for a listening audience; his recorded report on the experience was regarded as incomplete and in need of supplementing.⁴⁸

The intention of this article is to provide some supplemental material of a different sort that helps illuminate processes at work behind the decisions made for the premiere of *Music for Wilderness Lake*, and how qualities of the location affected its development. These aspects include its visual and acoustic qualities, the pre-existing raft, the quality of sounds at different times of day, and the

⁴² Schafer, 1.

⁴³ Ulla Colgrass, “R. Murray Schafer,” in *For the Love of Music: Interviews with Ulla Colgrass*, Toronto: Oxford University Press, 1988), 146.

⁴⁴ R. Murray Schafer, in *Music for Wilderness Lake*, Fichman and Sweete.

⁴⁵ See Gordon Hempton, “The Dawn Chorus,” in Bianchi and Manzo, *Environmental Sound Artists*, 145; Tyler Kinnear, “Music in Nature, Nature in Music: Sounding the Environment in Contemporary Composition” (PhD thesis, University of British Columbia, April 2017), 92; and Paul, “Binaural Recording Technology,” 768-71.

⁴⁶ John Reeves, in *Music for Wilderness Lake*, Fichman and Sweete.

⁴⁷ See, e.g., MacKenzie, “Influences of Soundscape Theory,” 132.

⁴⁸ It is also possible that “Arthur Tate” was too good at listening, capturing indiscriminately all sound within his periphery, including unwanted artifactual and technological sounds.

topography that determined the three trombone groupings. Crucially, archival and interview sources produced information indicating that although Schafer was the driving force behind *Music for Wilderness Lake*, the creative and logistical process that made the premiere possible was the result of circumstances and small, collaborative, and practical decisions in which everyone who took part in the premiere had a voice, features that would become hallmarks of Schafer's environmental works. In this regard, it is fitting that the raft/conductor's podium pictured in Figure 1 is shared by multiple participants, each with their own perspective and contributions. Through the combination of sketch study and archival research, I offer an account of what it might have been like to be on O'Grady Lake that September in 1979. In this way, viewers of Figure 1 can now imagine being a listener on the raft while seeing the scattered trombonists and technicians, putting themselves in the centre of the action and the environment.

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