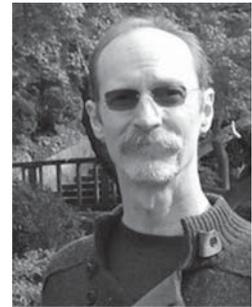


The Stroke and the Song: A Folk Group Experiences Music as Therapy

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1. Some thoughts on music, memory, and folk tradition (Michael Spooner)

Tradition is a path that leads us to our ancestors. Our steps may be slightly different from theirs, but the path remains, and the landmarks are still where our parents saw them. This is true of grand national traditions, but it is true also of the small informal traditions—the folk traditions—that grow up among families, friends, and other small groups of people. These small traditions, like the grand ones, tell us who we are and where we come from.



We four people meet once a week with several other friends to sing together. This is a tradition we began to observe in 2002, after our friend Barre Toelken suffered a stroke. An emeritus professor at Utah State University with an international reputation in the study of folklore and tradition, his writings are distributed around the world; many of his students are now celebrated scholars in their own right; and he has been honored with many awards. But to those of us who meet together once a week, Professor Toelken is mostly a dear friend, a wise relative, a teller of jokes and stories, and a singer of hundreds of songs. He is our elder.

Barre tells us that after the stroke, his memory of the 800 songs he knew had been completely wiped out; not only this, but, like many people who have suffered a stroke, he could hardly speak, let alone sing. None of the members of our group are medical doctors or miracle workers; we are only friends and family of a man who has taught so much to so many. All we know how to do is sing. So we began to sing every Tuesday with Barre, thinking this might bring him some pleasure, and we thought perhaps the singing could help him to remember.

Barre's stroke occurred in the region of the brain that, in Western medical research, is called the "Broca area." (Broca was a man who studied memory and the brain.) The Broca area is less than 5 centimeters wide, is located near the left ear, and researchers believe it is important to our ability to produce speech. Our knowledge of language is not located there, but this part of our brain is important to directing the motor functions we use to form the sounds of speech. The thoughts that

we intend to express must pass through the Broca area, where the commands are given to our lips and tongue and vocal cords, so that they will shape the words. There is evidence that this part of the brain is also involved with other cognitive tasks that are structured in ways similar to language—like performing music.

When a stroke occurs in the Broca's area, blood vessels are blocked and oxygen is reduced, causing atrophy in the brain tissue. Depending on how long this area is deprived of oxygen, the damage may be mild or severe. The patient will still understand language and may intend to communicate, but speaking itself becomes extremely difficult. The patient can experience what is sometimes called "expressive aphasia" or "Broca's aphasia"—an inability to talk. This seems to be what happened to Barre.

Researchers believe that other parts of the brain may attempt to compensate for the loss of function in Broca's area. One of these helpful sites is in the right side of the brain, above and beside the right ear—roughly opposite Broca's area—and is sometimes called "the right-side Broca's area." After a stroke, this right Broca's area can become very active, sometimes hyperactive, and some researchers suggest that it does so in an effort to assist the left side with its language processing. Unfortunately, hyperactivity in the right Broca's area can actually inhibit recovery from the injury in the left. Since language and music require similar brain functions, it is not too surprising to learn that this right Broca's area is a place where the brain handles music. Thus, researchers believe that by singing, we can occupy the right side area with its usual business, reducing its hyperactivity, and this allows the recovery on the left side to proceed with less interference.

Music is powerfully connected to language. Researchers notice that the structure of music is in some ways like language—it has a sort of grammar, and vocalizing in music and in language both involve rhythm and tonality—and of course the same muscles in the throat and mouth are needed to produce it. Music also has a strong association with emotion. Not only may certain pieces of music be associated with emotional experiences (such as a moving love song, or a patriotic anthem), but for some cultures, there are certain tonalities that seem to express or evoke particular emotional states. In Western music, for example, a minor key is perceived as dark, lonely, mysterious, or sorrowful.

For an individual with damage in the Broca's area, the associations between the language, music, and emotion in a song may create a mutual vehicle for each other. The tune and rhythm perhaps stimulate muscle memory of the motor processes used to form the words, and emotion can arise as the music is heard, reinforcing access to the words.

Recent research also tells us that our brain responds to social contact with others. Although for

most people, memory usually gets weaker as we age, elders who have many friends and activities evidently do not suffer as much memory loss as those who live alone without regular social contact. Social contact appears to refresh the tissue of brain—and can even make it grow.

After his stroke, Professor Toelken feared that the hundreds of songs he had learned and studied and performed all his life were gone forever. When he told his doctors, they offered no hope. “Oh,” they said, “that’s too bad.”

But through the music performed by his family and his friends—and through singing along with them—Barre began to remember the songs again. This process has been gradual and imperfect, but as time went on, parts of songs, and sometimes whole songs, would appear suddenly in his mind. To Barre, it is as if the songs have found a new path outward from where they were stored. And as he recovered the small bites of language in these songs, Barre’s facility with language in general began to improve, too. A music therapist might say that the singing and the social contact, by stimulating his injured brain, was helping him to heal. The music, words, emotions, and relationships together were adding a little energy to the process of healing his injury. That’s what we believe.

From his elders, Barre had learned many of the songs we sing, and we learned them from him. We are not medical doctors or brain researchers or music therapists. We are not even professional singers. But we know that as we sing these songs with Barre, the songs carry tradition with them—some traditions that are many generations old, and some traditions that are as new and private as our small group. We know that through our singing, Barre’s brain is trying to repair itself.

Tradition is a path that leads us to our ancestors, and traditional music is the path we chose to help our friend and family member—our elder—find his way back to us.

2. The day of the stroke (Midori Kubota Toelken)

The fourth of July is a national holiday in America and it is a time when working and non-working people have time off for activities with family and friends. Some of these activities include boating, camping, picnics, or taking road trips for sightseeing.

In 2002, during the fourth of July holiday, it was hot outdoors and Barre was working hard to trim back some bushes and a tree in our front yard. By the time he was finished he looked hot and very tired. He rested,



took a couple shots of single malt scotch, had dinner and went to bed for the night. In the morning

he was up and ready for some work at his office; I prepared some breakfast for him and he left.

While Barre was at his office, I spent time at my gardening in the back yard. Sometime in the late morning, I heard Barre come home. I thought it was strange that he would be back so soon, since he is normally at his office until dinner time. I gardened for perhaps a half hour more, then went into the house. I found Barre on the bed and asked him why he was lying down. He replied, "I think I had a stroke." I immediately called Kazuko, our daughter, and within minutes she came and we both took him to the hospital. Barre, at this point, was able to walk into the hospital but needed us to give him some support. The emergency care physician had some tests done to make a diagnosis of Barre's situation; the tests appeared to indicate that Barre had in fact suffered a stroke. In the meantime Barre's primary physician was taking his holiday break, boating at Bear Lake, a nearby resort area, and was not available to take charge of Barre's care. This was important, because a signature from the primary physician was required before the hospital would administer a medication that could reverse the effects of the stroke. We felt a lot of frustration, helplessness, and anger, as time was of essence; the drug must be given within three to four hours after a stroke, but the hospital could not reach the primary physician.

Three to four hours passed and still Barre's physician was not available. Barre, who was now showing signs of paralysis, was placed in a hospital room and onto a bed. He was purposely assigned to this room because it faced the nurse's station, where nurses could see and prevent any chance for injury to arise. However, while Kazuko and I were absent, Barre somehow pulled himself up to get off the bed, and he fell flat on the floor. Kazuko and I were very angry about this situation.

The next morning, when Kazuko, along with her brothers, her sister, and I were with Barre, Barre's physician came in to see him. Kazuko without hesitation told the physician she had made arrangements to get Barre to Salt Lake City to be seen by another physician. Because he had been unavailable when Barre needed him, he would no longer be Barre's physician.

Since we missed the window of time for Barre to have the special medication, Barre's paralysis continued on one side of his body, and he was having great trouble speaking. We wasted no time getting him into physical therapy. He was in therapy for six intensive weeks, and throughout all his sessions he had family and friends visiting him often. On one of those visits, Allen was able to get two or three other friends to come to sing for Barre, one of whom was Hal Cannon, a musician and singer of cowboy songs as well as other genres of folksongs. Hal had brought his guitar, and decided to try playing it with Barre. To play a guitar, it takes two hands, but, although Barre was moving his left side quite easily, he had no movement in his right side at all. Hal sat behind Barre, and placed his guitar in front of Barre in the normal position. Hal coaxed Barre to finger the notes with his left hand while Hal strummed the tune and sang a song. It was wonderful to see Barre able to find the

right chords with his good hand for Hal's song. On another day, Barre received a call from a friend in Germany. Barre spoke to his friend fluently in German without any hesitation. We were so surprised to hear him speak German when it was so problematic for him to speak in English.

We finally got Barre home, where the reality sank in that he would need speech and physical therapy for a long time. It had also become very apparent that Barre had difficulty recalling any of the hundreds of songs he once knew and the jokes and stories he use to tell. Reading became a difficult task, and anything to do with numerals was not functional anymore. Speech therapy helped to rechannel enough information stored in his brain for short conversations, but he was still unable to retrieve his songs. During this time, Allen came up with the idea of bringing friends together to sing once a week at our home with the thought that music therapy might help Barre start recalling any one of those hundreds of songs remaining in his brain.

3. Friends gather (Allen Christensen)

I met Barre in 1998 at a dinner party, but I didn't know at the time that we would get to be such good friends. Barre headed the folklore program at Utah State University and was involved with the Utah Arts Council, chairing that council for some years. He played the guitar and knew lots of songs, over 800 of them, many of which I hadn't heard before. They were old songs, sometimes with a familiar melody, but with lyrics unfamiliar to me: sea shanties (working songs of the sailing ship era), cowboy songs, drinking songs, African American spirituals, hymns. The songs were about the lives of people and had been passed down from generation to generation. There were hundreds of songs. It was great.



In 2000, when Utah State University hosted the Fife Folklore Conference, I was invited, along with other friends, to sing with the Toelken family as part of that conference. That was the first time I sang with my friends here. We sang traditional songs, all of which Barre and his family had taught to me.

Barre Toelken was not always a folklorist. When he was a young man he was prospecting for uranium in southern Utah. He was by himself, in very rugged wilderness when he became ill. He struggled several days thinking he would get better. He didn't. Soon he passed out, and when he awoke days later, he was in the hogan (traditional dwelling) of a Navajo family named Yellowman. It took weeks, but they fed him and nursed him back to health. It was the start of Barre's Navajo life. The Yellowman family adopted Barre; he learned their language and customs and became a trusted member of the Navajo people. Barre married for a short time, lived on the reservation, and

had a daughter named Vanessa. I will mention her again later. Barre's relationship with the Yellowman family and the Navajo people continues today.

In the midsummer of 2002 Barre suffered a stroke, as Miiko (Midori) has described. It was, of course, a very distressing time for his family and friends. After he was stabilized, the doctors determined the stroke's full effects; it had been aggressive and brutal and there were tragic consequences. Barre lost his ability to speak fluently. He lost all the songs he loved so much. Interestingly, he could still speak German and Navajo. He also retained the ability to sing a melody. One day, Kazuko and Miiko arranged for some of Barre's friends to come to the hospital and sing with him. Eight people came that day.

In the autumn of 2002, after Barre returned from the hospital, we, seven of us, met at his home on a Tuesday night to sing, and we continued to meet every week through that winter. Since then, our group has grown and evolved, but the one thing that hasn't changed is that on Tuesday night we sing. Over this time, Barre has been able to recall many of the songs he thought he had lost.

Vanessa, Barre's Navajo daughter, has had a role in keeping Barre involved in the culture of the Navajo. Traditional Navajos believe that a disease is an attack on the person by outside forces. As an adopted Navajo and a folklorist, Barre has participated in traditional Navajo healing ceremonies to heal him from attack and to help keep him "in balance." The ceremonies are commonly called "Sings" and often take three days to complete; some are cycles called "Blessing Way" that require more than one Sing, and these can be separated by weeks or months. Even before his stroke, Vanessa had arranged for a Sing cycle to be done for Barre; three Sings in this cycle had been finished and one was left to do when the stroke attacked him. Vanessa saw to it that he completed the cycle.

I believe the Tuesday night singing group, along with the influence of Barre's Navajo family, have had a profound effect on Barre's physical and emotional life since his stroke.

4. Healing the one, healing us all (Kazuko Toelken)

As Barre Toelken's daughter, I grew up around singing and storytelling. I learned the tunes and words by listening to, and singing with, my dad. Through singing, I also learned about my family and their history—where family members came from, the various occupations they held, remedies for mental and physical health and foodways. I also learned history and traditions of other cultures, because Dad brought many different people into our home: his students, colleagues, friends, neighbors, and people from all over the world. I learned how to behave



in my multi-cultural world. Traditions provide structure and understanding of everyday life situations for individual and group identity, and I learned at an early age to be flexible with my traditions depending on the different cultural settings we were in. Singing in our home is still a tradition, and throughout my life, singing has played an integral role for my parents and myself.

Different groups have gathered in my parents' home to sing ever since I can remember. When I listen to recordings from past groups, I realize the changes in these "sip and sing" traditions. Group dynamics are different. The traditions of the latest group have developed and have even changed the way some of the songs are done, to a way that is not connected to the real tradition of the song. Also, Dad used to be the one "in charge" of the singing events; people looked to him to lead. Now others lead, and new traditions are born.

Passing on the songs is also a tradition in our family, and Dad was in process of teaching me the numerous songs he knew, when the stroke hit him. After this, he lost all memory of the songs and had great difficulty speaking. The reality of the stroke's effects was traumatic for him, and greatly disoriented all of us—his family, friends, and colleagues.

As a young man, Dad was adopted by a Navajo family, and later he studied their stories and traditions as a scholar. Navajos see illness as a disruption caused by something outside the person, and they see it as affecting the person's entire family. So, when a Navajo gets seriously ill, ceremonies are performed to heal not only the patient, but the family, too, and even whole Navajo nation, because everyone is affected. During such a ceremony, everyone is involved (family, friends, neighbors, strangers), and everyone helps. Medicine men and women sing songs traditional for that ceremony, and they sing throughout the duration of the ceremony.

Prior to the stroke, Dad had been studying Navajo sacred stories, and had been discussing them and analyzing them for better understanding by non-Navajo scholars. Navajo medicine men warned him to halt his research. "Skin-walkers and witches dissect stories for evil use," one of them told him. "Are you prepared to die—or for one of your family members to die?" Dad's Navajo family immediately made arrangements for a Blessing Way ceremony, to protect him and everyone from potential harm.

The Blessing Way is a series of four ceremonies conducted over a period of months. Family and friends gather to observe or participate, and Navajo singers perform traditional healing songs. The first ceremony for my dad was held at my parents' house in Logan, Utah. The second ceremony was held at my house in Smithfield, Utah. The third ceremony was held in Red Mesa, Arizona on the Navajo reservation in a hogan (traditional Navajo dwelling) that belonged to a family he knew. Unfortunately, before the fourth ceremony could be arranged, the stroke hit him. Later, when he

was able to travel, the fourth Blessing Way ceremony was held in Tuba City, Arizona at his eldest daughter's house on the Navajo reservation, hundreds of miles away from home. Two friends from our singing group, Allen and Gail Christensen, attended with the family.

Back home in Logan, friends who sang with Dad prior to his stroke gathered together and sang for him. Allen Christensen, Michael Spooner, and others decided to meet once a week at my parents' home to sing with Dad, to engage him in singing, nudging his mind to remember words. Every week they came over, and in time more people would join. Singing with my dad became a weekly tradition, going strong since 2002 and still occurring today. Although at first he could recognize the songs but not remember the words, in time, Dad recalled many songs and started to sing again, himself—and even to lead the group a little.

We all realize the importance of keeping Dad singing and being an active participant, to help the healing process continue. We know that Dad's Western doctors were working to heal him from the inside. We were healing him from the outside through the power of song and tradition. The traditional Navajo songs that are performed in the Blessing Way contributed, too, helping to protect him and his family from further harm.

As we returned from the Blessing Way, surrounded by the protection of the Navajo songs, we understood in a deeper way the importance of the singing that we do together every week. Together, through our own singing tradition, we are not only helping Dad to heal, but we also help to heal ourselves.

You can see videos of the group singing and interviews with some of the singers on YouTube.

Interview with Miiko and Barre Toelken: <http://www.youtube.com/watch?v=Odbu-8EiKlk>

What Makes a Good Folk Song?: http://www.youtube.com/watch?v=-IsddbF_v_0

Interview with Lynne McNeill, Folklorist: <http://www.youtube.com/watch?v=k67SmKhKGgc>

Interview with Isaac Spooner, Singer: <http://www.youtube.com/watch?v=obLa2U87egs>