



LETTER TO THE EDITOR

Failed Test of the Possibility that Pam Reynolds Heard Normally During Her NDE

To the Editor:

In a recent article in this *Journal*, Gerald Woerlee (2011, pp. 23–24) contended that the results of a particular sound test would serve to substantiate that near-death experiencer (NDER) Pam Reynolds heard through normal physical means during her near-death experience (NDE). He invited readers to download a software program available via the Internet and to conduct the test. I have done this test, and following is my report.

To begin with, I found the Windows software, Test Tone Generator, was fairly easy to use. Thus, I concur with Woerlee that virtually anyone should be able to conduct this test for oneself.

To put this test into context, I quote Woerlee regarding his view:

Nowhere in the otherwise excellent account of the Pam Reynolds experience is there any mention of her hearing the clicking sounds of the BAEP [Brainstem Auditory Evoked Potential] stimuli in the ear to which it was applied. Yet there is mention that the BAEP was used to determine her level of consciousness throughout her operation, clearly indicating that these stimuli were correctly applied. This discrepancy indicates that she ignored these clicking sounds, much as people typically ignore engine noise in an automobile or airplane. (Woerlee, 2011, p. 20)

When I first read this material, I was initially quite surprised, because although Woerlee was correct that people often habituate to noise and ignore it, that habituation occurs only to a certain point. There are limits beyond which people cannot become used to and ignore noise because it is too irritating. This is particularly the case when the noise is very loud, such as the clicks of 95–100 decibels that the surgical team used with Reynolds.

So I did the test, using conditions the same as Reynolds': 95–100 decibel clicks at the rate of 11 clicks per second in one ear and 40 decibel white noise in the other, which I increased to 50–60 decibels; then switched ears. I found that the clicking sounds *became intolerable within a few seconds*. These sounds created so much pressure on

my eardrums that they even *hurt* me. Hence, I found them to be very irritating and thus impossible to filter out and ignore. Despite my resolve to stick with the test for at least a few minutes, I found it virtually impossible to persist for more than a few seconds.

So how Reynolds could have become habituated to these horrible sounds, and then under such dire circumstances as her life-threatening surgery, is beyond my comprehension. I am particularly perplexed when I consider that Pam Reynolds was a *musician*, a singer/songwriter whose life was devoted to beautiful, harmonious music. Whereas Woerlee alleged that “it is very reasonable to conclude that she may have been conscious at the time” (p. 15), heard through normal means, and habituated to the clicking sounds, I believe that if she had heard those horrible sounds, she would have gone mad on the operating table—and certainly would have remembered and reported the traumatic aural experience that was occurring at the same time as her other auditory perceptions such as the sound of the cranial saw and of the conversation among the surgical team.

Over the years I have seen and listened to four interviews with Reynolds—all available on YouTube—and Woerlee is correct: In no case did she mention those terribly harsh and loud clicks. I find it highly unlikely that she heard them physically. I find Woerlee’s allegation that she “filtered out” these noises and next listened to what was being quietly said in the operating room to be untenable. I find it hard to believe anything other than that she did not report hearing the clicking sounds because she did not hear them—through physical or any other means.

In addition, here is Chris Carter’s (2011) initial response to Woerlee’s explanation:

The alternative explanation is, of course, that Reynolds did not mention hearing the loud clicks because she was unconscious due to the heavy anesthetic and was therefore unable to hear through normal sensory channels. There is no defensible basis to claim that Reynolds undoubtedly heard these sounds simply because brainstem auditory evoked potentials were being monitored. The conscious perception of sound is a function of the cortex, but the response to the clicks being monitored was in the brainstem. Brainstem responses—whether BAEPs or pupil constriction in response to light shone into the eyes—do not require that the patient be conscious. (pp. 45–46)

Apart from all that—yes, it is true: With a good-quality headphone that covered my entire ears, I was able to hear ambient sounds through those banging clicks that the Test Tone Generator software produced.

However, when I pressed the phones closer to my skull, the ambient music and voices became much harder to hear. In addition, though I could recognize that I was hearing voices, they became garbled such that I had difficulty hearing exactly what was being said.

In a recent e-mail (personal communication, June 6, 2012), Carter added:

Note that if ambient noises were allowed into Pam's ears, that would mean the technician did not do his job. The white noise filtering is designed to filter out all other sounds, as the brainstem responds to changes in sound, not constant white noise.

Carter's point was that the whole purpose of the surgical setup was for Reynolds to hear only the clicks in one ear—nothing else whatsoever. Once again, it should be emphasized that the actual setup was quite different than my experiment. The speakers in Reynold's ears were molded into place to try to ensure that no ambient sound would seep through. In addition, they were sealed off with gauze and tape—to keep out the sterile water used to wash away the bits of bone and blood that are flying everywhere when one cuts into tissue and bone.

I find that all of these features of Reynolds' surgical setup make it very, very unlikely that she could hear by normal means—especially given the low possibility that she experienced anesthetic awareness. As Carter made clear in his response to Woerlee, patients who experienced anesthetic awareness usually reported the experience to be unpleasant—unlike Reynolds' experience that ranged from neutral observation to emotionally pleasurable experiences—until the very end of the surgery when her unpleasant subjective sense was that “she” had to reenter her seemingly lifeless body, a process she anticipated would be painful.

Another point: Returning to waking consciousness during and after an operation is often accompanied by grogginess. By contrast, Reynolds reported lucid consciousness during her NDE.

I asked a few other people to do the same hearing test.

This is what Kristopher Key reported to me by email: “I could hear some of the conversation around me, but not well enough to reconstruct it all. I certainly heard the beeps more than anything else though.” (personal communication, May 23, 2012)

And Michael Prescott (2011) said on his blog:

Okay, I tried the software experiment. I didn't get exactly the desired results, however, because I heard both the white noise and the clicking sounds in both ears. Ideally, you want white noise in one ear and

clicking in the other, but my computer's sound system apparently won't do that.

At any rate, here are my impressions. First, the clicking is very loud and annoying, like a jackhammer in your head. (To get the full effect you need to use earbuds, which I did.) Second, the white noise, even when increased to 60dB, is not prohibitively loud. Third, it is possible to hear room sounds above the white noise and clicking even when both sounds are playing in both ears. I tested this by turning on my TV (normal volume); I could clearly hear the conversation playing on the TV set, but I had to deliberately ignore the distracting clicks.

Pam Reynolds' situation was different from mine, of course. She wore specially molded earplugs which fit into her ear canals much more snugly than the plastic earbuds I used. She also had layers of gauze over the plugs to seal them in place. Most important, she was heavily sedated.

So could she have heard the noises above the clicks and white noise? Probably, though the custom earplugs and gauze would have made it even more difficult. Could she have forgotten the clicks and remembered only the other sounds? It seems doubtful, given the loudness of the clicks. Could she have heard these sounds while under sedation? It seems unlikely, but the possibility can't be totally ruled out.

So Michael Prescott was a little more cautious than Kris Key and I were, but the message is clear: The noise produced by those harsh bleeps could not be ignored. Instead, they were very irritating ("jackhammer in the head"), so if Pam Reynolds, a musician, were hearing through physical means, she would certainly have heard the clicks and become extremely irritated by them while she lay on the operating table. But in multiple interviews she mentioned none of it.

I placed the above material on the blog of Amazon on April 2, 2012 (http://www.amazon.com/review/R2C2V8J3JMO8Q1/ref=cm_cd_pg_pg62?ie=UTF8&asin=1594773564&cdForum=FxNPU9ZANWBS7C&cdPage=62&cdThread=Tx1XK00VD3J08DQ&store=books#wasThisHelpful)—posting 611. At this blog, I and others have been debating this topic for two years or so (more than 800 postings!). Later that day, Woerlee posted the kind of response that characterizes his previous publications; his perspective remained unchanged.

. . . As does mine. As far as I am concerned, I have tried his experiment and found not only that it failed to support his thesis but that it actually supported even more strongly what Pam Reynolds indicated all along: that during her NDE, she was not hearing with her physical ears but with some as-yet unexplained capacity associated with her consciousness that she perceived to have been located apart from her physical body.

References

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