Among the many reasons to do networked performances, one reason is to push the medium so that it gets better.

Another reason: “We just want to play music together without all the bother of buying plane tickets and the time it takes to travel—” Ge Wang founder of SL ORK at CCRMA at Stanford University.

A recent performance of my piece The Tuning Meditation had musicians and audience at Stanford University performing together with musicians and audience at Beijing University 6000 miles away on May 2, 2008. The audio was beautifully clear. My image projected on screen greeted both audiences via SKYPE from Cassis FR. My low tech video presence was within the high tech CD quality audio transmission facilitated by JackTrip – software developed by Chris Chafe – director of CCRMA High definition video was streamed using VLC Video Lan streaming software. (See : http://www.videolan.org/vlc/streaming.html, and http://wiki.videolan.org/Main_Page).

Since the fall of 2007, IEAR Studios of the Arts department and CARL of the Architecture department at RPI where I teach have been collaborating on a weekly basis with CCRMA at Stanford University. This collaboration has allowed for steady development of the “telematic” medium and the formation of the “telematic” Circle. (See: http://www.deeplelistening.org/site/telematic). The purpose of the “telematic” Circle is to provide information on how to connect and to encourage an association of new partnerships and collaborations. The Anet Summit organized by Chrs Chafe at Banff Center April 11-12 2008 provided a forum for papers, demos, performances and networked jam sessions. (See :http://www-ccrma.stanford.edu/~cc/vox/anet08).

Deep Listening Institute, Ltd. (a non-profit arts organization founded in 1985) commissioned six composers to write pieces specifically for the “telematic” medium using Jacktrip and iCHATav. The pieces were successfully performed on April 27 2008 between iEAR Studios, RPI, CCRMA Stanford University, and Vista Muse, CIRCA at University of California San Diego another member of the “telematic” Circle.

In December 2007, a mixed reality performance involving dancers performing as avatars in Second Life were projected on screen with a real life (RL) dancer performing in relationship to the dancers on screen. She moved slowly with great concentration and poise while the avatars zoomed around doing impossible moves on screen. Two musicians performed live on stage with their audio and video sent into SL and shown on screen in SL above the avatars for a SL audience. This performance took place at Northwestern University during the conference of the International Society of Improvised Music (ISIM).

The above examples of networked collaborations are a few of many mixed low and high tech networked performances that have engaged me since 1990. The technology has ranged from video telephone with still images updating every five seconds; to Picture-Tel with ISDN lines with better audio and video updating every two seconds; to audio only on the INTERNET with no video for lack of bandwidth and an eight second audio latency but easier access; to iCHATav with compressed audio and video with minimal latencies - more for the video than the audio; to Internet2 flawed with packet dropouts in addition to latencies; to JackTrip with stable low latency CD quality 8 channel audio and Ultra Video Conferencing from McGill University for DV quality video.

Latency is of course a big issue in networked music transmissions. There are many factors to deal with ranging from CPU power to firewalls routers and all manner of arcane IT “rigamarole” (politics). I call it head banging and have spent more hours than I care to count testing, checking and curbing my frustrations.

So why do it?

Another reason is because you can. JackTrip has eliminated significant latency for audio. Another is because the rise of technology is inexorable. There is desire. The transmission of audio and video in both low and high quality opens the world to otherwise impossible collaborations, a gathering of knowledge for a richer, broader view and exploration of the world. This is the time to dream on.