The following was published as a letter-to-the-editor following the publication of Observations on the perpetual music track. *Journal of Consciousness Studies Online, Letters-to-the-Editor*. September 3, 2006. I've recentlyk discovered that those letters were not kept perpetually on line, so I'll post this personal description of my life with a PMT on my archival site, www.paradigm-sys.com. Pic(s) added 2021 as eye candy.

Observations on the Perpetual Music Track (PMT)

Charles T. Tart

Volume 13, Number 6 (2006) of the *Journal of Consciousness Studies* arrived in the mail a while ago, and, after a quick glance at the table of contents, I put it aside until I had time for serious reading. I thought I would probably be interested in Steven Brown's article on "The Perpetual Music Track: The Phenomenon of Constant Musical Imagery."

As I started dinner last night I decided I had time for some serious reading.

As I reached for the *Journal*, my personal Perpetual Music Track (PMT) instantly switched from whatever tune it had been playing to looping the first line of the theme from Disney's Snow White and the Seven Dwarfs:

Oh Ho Hi He, Hi Ho, It's Off To Work We Go.....

while an undetailed visual image of the seven dwarfs, picks and shovels over their shoulders, marched off into some corner of my mind. What more apt representation of my mental intentions could there be? And perhaps a prediction that this was going to be work...

My mental version has drifted from the original I heard in the film more than 50 years ago ("Hi Ho, Hi Ho, Its Off to Work We Go"), but I'm sure the tune is right, even if my words have changed slightly.

Reading Brown's article, I at last discovered my "diagnosis." I have (pick any or all of the following) (1) got, and/or (2) been cursed with, and/or (3) been blessed with PMT. Life has not been a silent movie for me, it usually has a rich and varied sound track. Now I have a scientific sounding acronym for it, PMT, which is cool!

As Brown reports that his is the first and only serious scholarly article on PMT, I will share some observations of my personal experience, collected over many years as part of a general project of attempting to understand my own mind better, thereby doubling the scholarly literature. I'll generally write in the mode of number one, above, I've "got" it, and will try to comment on it neutrally and as objectively as possible. But there have been many occasions, mostly in years

past, when the second perspective has been strong and I've felt I've been "cursed" with PMT: these have been times when I've wanted my mind to be quiet, as in practicing various forms of meditation in order to see more deeply into myself, and here's some idiot song using up my mental capacity! I also believe that most of the time I'm "blessed" with PMT, as it adds a generally cheerful emotional tone to the rest of life.

This report can be read on its own, but will be much richer if the reader has first read Brown's article.

Frequency:

For most of my life my PMT has indeed been "perpetual," in the sense that if I am not concentrating on some other internal process or engaged in external sensing and responding, a song will start up, usually just one to a few initial lines, and begin to loop. Sometimes these loops will go on for minutes or hours, but often a new song will come in and displace the previous one. Since learning some basic vipassana meditation skills some years ago, mostly from Shinzen Young (www.shinzen.org), I can now have long (minutes to occasionally hours) periods without the PMT background if I wish to. Left to itself, though, my mind will almost always be playing some music.

Choice and Content:

The "decisions," if such they be, as to what music or song will play in my PMT are usually not a conscious process. Some song starts, another song eventually takes its place, "I" have not had anything to do with most of these choices that I know of, they just happen without conscious intent on my part. Sometimes an external stimulus will be clearly responsible for the choice, sometimes the song that starts will be related to what I'm consciously thinking about in an obvious way.

Occasionally I will deliberately wonder why I'm hearing a particular song on my PMT that does not have an obvious relation to what I'm sensing or thinking, and with more examination, will see that it is actually a relevant comment or addition to my conscious thought and feelings. The song theme might reveal an emotional undertone to conscious thoughts that I hadn't been aware of, for example. As a psychologist, I'm inclined to attribute causality to my "unconscious mind" in such cases, although some of these relationships may be either coincidence or a rationalization on my part.

Control:

I can deliberately decide on a song I want to start and the PMT will usually

pick up on it and start looping it. If there is already a persistent song going, though, I have to keep exercising some conscious intention or the PMT will revert to looping the previous song or switch to a new one of its own choice instead of the one I've consciously chosen.

At this point in my life, with some skill in concentrative and insight meditation, I can usually deliberately stop the PMT if I wish. Sometimes it will stay stopped, but often it starts again in a few moments after I stop consciously intending for it to stop.

If my PMT is looping on some song or music that annoys me and is very persistent, my efforts to stop it sometimes have almost no effect: I can't quiet my PMT. In such cases the only effective way to stop it is not to actually stop the PMT but to "switch records," to deliberately start a more congenial tune going that I don't mind being stuck on as much. It may take repeated efforts, as the PMT repeatedly reverts to the original, annoying tune, but can be done.

There is one situation in which it is almost impossible to stop my PMT, short of a continuous effort of will or strong outside distraction. That is eating. The rhythm of chewing activates my PMT and it plays along in synchronizations to that rhythm. This has been especially annoying to me, the "curse," when I've been on meditation retreats and trying to practice continuous mindfulness in all activities, like at meals, not just during formal meditation practice. Some song, often (by meditation retreat standards) an idiotic one like

I've got a lovely bunch of coconuts, There they are a-standing in a row. There stands me wife, The idol of me life, Singin roll or bowl a ball a penny a pitch.

takes possession of my PMT, synchronizing with my chewing. If I deliberately stop chewing the song will go on hold, silent - but pick up again right where it left off on the next chew! There's no conscious effort on my part to have such an exact pause and pick up, it just happens that way. The only thing I've found that reliably works, that gets me back into the spirit of a meditation retreat, is to deliberately substitute some Sanskrit mantra for the song. That at least reminds me that I'm on a meditation retreat and lets me give more attention to conscious mindfulness of the external world.

If I'm eating in a social situation, conversing with others, I don't notice the PMT at all. Similarly if I am absorbed in reading while eating, I don't notice it. I say "don't notice it" to be as accurate as possible, but I think the PMT actually stops in these circumstances.

I have no idea why chewing is such a powerful stimulus to the PMT. Was I so bored with eating as a child that I had to entertain myself with song? I don't know...

Dreams and My PMT:

Unlike Brown, I don't believe I have my PMT running during dreams. I base this not only on current observations, but ones from years ago when I was extremely interested in my dreams and was a rich dream recaller. While I can hear sounds appropriate to the action in dreams, I believe musical accompaniment has been rare, if it occurred at all.

Range of Music:

Brown finds his PMT frequently repeats the first lines of music he has heard within the past day or two. My music is much more wide-ranging, probably including every song or musical composition I've heard in my life. Frequently I find my PMT is looping the first lines of some song, musical piece, or radio commercial that was popular in the 1930s. While I undoubtedly heard it on the radio as a child, or heard my father singing it around the house - he was a musician and popular singer in our home town - it's probably the case that I haven't heard it played in the external world for more than 40 or 50 years. It often amazes me when I hear my PMT doing an oldie like this, apparently quite accurately as regards the tune and words. Why do these early musical memories have such permanence in spite of a lack of external reinforcement?



My father, far left, and his band.

With an N of two at this initial stage, Brown and I, speculation about this difference can only indicate possibilities for future research, but I will briefly make one. Brown is a musician, much more consciously involved with listening to and creating music in his everyday life. I like to sing, but have no training to play any musical instrument. Music is generally background music in my life, rather than foreground, as is my PMT. Perhaps this accounts for recently heard music being a major determiner of the content of his PMT. As a child, I very much wanted to be a good singer like my father, but felt terribly inadequate. From an adult perspective, of course I was inadequate, comparing my child's voice to his. Too bad I took it seriously. Perhaps as a semi-conscious tactic to get better I wanted my mind to get automatically good at remembering songs and music? Perhaps these are dimensions that might account for individual differences in PMTs?

Quality of the PMT:

I do not have Brown's musical training and so cannot comment on discrete musical aspects of my PMT like pitch, tonality, rhythm, etc. But to my layman's ear, what I hear in my mind sounds just like what I would hear if the music were played on the radio. I was going to write "on the stereo" to indicate high fidelity, but realized that my PMT is basically monaural, in the center of my head, rather than having clear stereo separation. Could this be the result of almost all of my early music exposure being to old-fashioned monaural radios or my father singing around the house, rather than to live music? As to internal volume, it can range from quite soft, on the fringes of audibility if I am distracted by other sensations or thoughts, to experientially quite loud.

Creativity:

Almost all of my PMT's song activity is an accurate reproduction of the words and tune of the original external song. Occasionally there is a spontaneous creative alteration of words that is an apt comment on an ongoing situation, but only occasionally. In terms of conscious abilities, I am good at almost instantly creating novel words to go with familiar tunes, a kind of sense of humor, but have no feeling at all for how one creates new melodies.

Corporeal Manifestations of My PMT:

Brown reports frequent corporeal manifestations of his PMT, ranging from foot tapping to the rhythm of the PMT to his fingers playing an imaginary keyboard, "air piano" as he delightfully calls it. I experience nothing like this.

Parallel Processing:

Brown notes that "The evidence from PMT is that acoustic consciousness can be split into two parallel streams.....most of the time the imagery doesn't seem to impair my allocation of attention to other tasks and simply plays in the background as an acoustic stream." (pp. 54-55). I can elaborate on this from a different perspective.

For some years I have been practicing vipassana (insight) meditation, mostly along the lines taught by Shinzen Young (www.shinzen.org). For most of these years a major focus has been on cultivating the neutral, objective observation of aspects of body sensation, without becoming involved in judging whether any sensation is "good" or "bad," and practicing clarity and equanimity toward sensation. I had heard various meditation teachers talk about observing thought, but never had any luck in it. When a thought came along it always swept me up in it, I identified with it as "my" thought and would get carried along in some thought train for long periods before remembering that I was attempting to meditate.

In the last few years, though, Young has taught me how to observe thought and visual imagery quite well, mainly through "somatizing" it, localizing it in the tactile space of the body. For me, e.g., internally generated visual imagery appears on a "mental screen" which feels located in a plane parallel to my face, just behind my closed eyes. By keeping some contact with that area tactually, I am more aware of visual imagery and less likely to be absorbed in it. Similarly, I have located my internal "talk" as occurring in a central intracranial region on a line slightly below my ears, probably where my vocal cords are located, so much, if not all, of my mental talk may be

subvocalization. By keeping some attention on that physical area, I am more sensitive to and less likely to automatically identify with and be swept away by internal talk. I feel subtle sensations there when internal talk occurs. By physically relaxing this area, internal talk decreases.

(To my surprise, when I learned to observe internal imagery and talk in this manner I discovered that my vague category of "thought" actually consisted primarily of visual imagery and secondarily of actual internal talk.)

The relevance to PMT is this: I have no recognizable tactile sensation in that same talk area when PMT is occurring. In fact I have never been able to find a physical localization for PMT, and I have tried to find one many times. My hope was that if I could find a localized area, relaxing it would decrease PMT, as I can do for internal talk.

This is semi-disciplined observational data supporting the theory of the relative independence of the PMT process from the internal talk process. I call it "semi-disciplined" as I don't think of myself as really skilled in meditative observations.

In Conclusion:

OK, I'm ready to sit back, turn off the external background music, and wait to see if the next record the PMT puts on will be an apt comment on what I've written... I've never made a conscious demand on my PMT before, so I don't know how this will turn out. I'm trying not to consciously think about how it should turn out in order not to bias it. Perhaps the distraction of checking my email....

Wouldn't you know that when I would like a little PMT, my mind is quite quiet... ;-)

Damn! I shifted my attention to another task and immediately the PMT came on with that silly,

I've got a lovely bunch of coconuts, There they are a-standing in a row. There stands me wife, The idol of me life, Singin roll or bowl a ball a penny a pitch.

What kind of comment from my subconscious is that on this scholarly writing? That it's all nonsense? That we are starting to line up our coconuts, our nourishing bits of information about mental function so they will become as valuable to us as my wife is to me?

Perhaps I'd better end with that always safe scholarly admonition, "More research is needed."