The Sounds that Reach the Soul

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✓ Jerusalem of gold, and of bronze, and of light, Behold I am
a violin for all your songs. We have returned to the cisterns,
to the market and to the market place A ram's horn calls out
on the Temple Mount in the Old City. And in the caves in the
mountain thousands of suns shine - We will once again descend to
the Dead Sea by way of Jericho!"

In her famed piece, "Yerushalayim shel Zahav" ("Jerusalem of Gold"), Israeli songwriter and musician Naomi Shemer depicts the Jewish nation's desire to return to the holy city of Jerusalem. In 1967, when Jerusalem was freed by the Israeli Defense Forces (IDF) during the Six Day war, Shemer added the final stanza to her song. At the time Jerusalem was liberated, the Israeli soldiers sang the original version of the song at the Western Wall. The line, "A ram's horn calls out on the Temple mount in the Old city," alludes to Rabbi Shlomo Goren, the Chief Rabbi of the IDF during the Six Day war, blowing the shofar, a ram's horn, upon the capture of the city [1]. The shofar is a symbolic item in Judaism and has served a variety of functions for the Jewish people, dating back to biblical times.

The shofar is mentioned seventy-two times throughout the Bible in many different contexts [2]. When the Jewish people stood at Mount Sinai, ready to receive the Torah, the shofar was sounded loudly, as it says, "And it came to pass on the third day, when it was morning, that there were thunders and lightning and a thick cloud upon the mount, and the voice of a shofar exceeding loud..." (Exodus 19:16). The thunder, the lightning, and the loud noise of the shofar caused the Jewish nation to tremble in awe of G-d upon becoming His nation.

The shofar was not only used to instill the awe and the fear of G-d into the Jewish people at Mount Sinai, but it also served military purposes. When the Jewish nation entered the land of Israel during the war against Jericho, G-d instructed Joshua to encircle the city once for a duration of six days. On the seventh day, Joshua was instructed by G-d to encircle the city seven times, and the priests were instructed to blow shofars. When the shofars were sounded and the people cried out, the walls of the city collapsed, and the Jews captured Jericho, ultimately leading to their triumph (Joshua 6:1-5). The shofar was also used to frighten the enemy when Gideon the Prophet led the Jewish people in war against Midian, as it is written:

Now Gideon came with the hundred men that were with him to the edge of the camp, in the beginning of the middle watch, when they had but recently awakened the guards; and they blew the trumpets, and they smashed the pitchers that were in their hands...And every man stood in his place around the camp; and the entire camp ran, and they trumpeted, and fled. And they blew the three hundred

trumpets, and the Lord set every man's sword against his fellow, and throughout the whole camp...(Judges 7:19, 21-22)

The shofar was also used to announce victory in war. When King Saul reigned over Israel, and Jonathan killed the Philistine officer, Saul sounded the shofar to spread the word of the victory over all of the land of Israel (I Samuel 13:3-4). Due to its distinct sound, the shofar was used prior to entering battle to summon the soldiers to gather in prayer and repentance [3]. The shofar was also used during war to warn the people that the enemy was approaching and to signal a ceasefire. Furthermore, the shofar was used to alert the people about a rebellion [2].

Upon the coronation of a king, the shofar was sounded. When Abshalom became King of Hebron, he sent spies throughout the land and instructed them to inform all people that when they hear the shofar, they should respond with "Abshalom is King in Hebron" (II Samuel 15: 9-10). After the downfall of Queen Jezebel, Elisha the Prophet instructed one of his disciples to anoint Jehu as the King of Israel. To announce Jehu's anointment as King, the shofars were sounded (II Kings 9:1-2,13). As seen in Psalms (47:6), the shofar was also used as a symbol of coronation of G-d over the entire universe [10]. During the times of the Temple, the shofar was used as a musical instrument in conjunction with trumpets. The shofar was also used to announce a new moon and the Jubilee year, the latter of which happened every fifty years.

Today the shofar serves as an integral part of Rosh Hashanah and Yom Kippur services. As mentioned by Maimonides, the sounds of the shofar impel one to introspect and engage in repentance for his misdeeds. He states:

Even though the sounding of the shofar on Rosh HaShanah is a decree, it contains an allusion. It is as if [the shofar's call] is saying: Wake up you sleepy ones from your sleep and you who slumber, arise. Inspect your deeds, repent, remember your Creator. Those who forget the truth in the vanities of time and throughout the entire year, devote their energies to vanity and emptiness which will not benefit or save: Look to your souls. Improve your ways and your deeds and let every one of you abandon his evil path and thoughts (Mishneh Torah Hilchos Teshuva 3:4)

A specific sequence of blasts are blown with the shofar to fulfill the commandment of listening to the shofar on the high holidays; these blasts of the shofar have both neurological and endocrinological effects on listeners. In her article "The Science of Shofar," Yvette Alt Miller described one's reaction to the shofar's blasts [4]. Upon listening to alarming sounds like the blasts of the shofar, one's fight or flight response may lead to a cascade of events that bring about a physical change in the body. The body becomes transformed,

allowing the listener to become much more alert. During a state of alertness, the hypothalamus, which has an abundance of functions including serving as the control center of the autonomic functions of the peripheral nervous system, secretes hormones. One such hormone is neuropeptide-S, which suppresses anxiety and appetite and reduces the need for sleep. Moreover, this small effector proteinneuropeptide-S induces wakefulness and increases feelings of energy. Adrenaline and norepinephrine are also released from the adrenal glands, which are responsible for mental alertness and increase heart and breathing rates. The aforementioned physiological changes sharpen attentiveness.

Along with a heightened cognitive alertness, one's sense of emotions and long term memory are enhanced upon listening to the loud blasts of the shofar. Once startled, our amygdalae are stimulated by neurotransmitters known as catecholamines, which include adrenaline and norepinephrine. The amygdalae, located in the temporal lobes of the brain, process emotional reactions. The sudden startling sound of the shofar not only stimulates the amygdalae, but it also stimulates the hippocampus, which is in close proximity to the amygdalae in the brain. In the "fight or flight" situation, the hippocampus is stimulated to ensure that one remembers the course of events that transpired during the situation, as a way to learn from the stressful episode. All experiences during this new state of alertness are engrained into the memory for a much longer time than they would be for non-fight or flight experiences.

Overall, the brain is much more active in times of stress than it is at rest. It is during these more intense moments that one endures, such as on Rosh Hashanah and on Yom Kippur when listening to the shofar, that neurons in the brain receive more signals and a person is able to process a greater amount of information. During the brief moments when one listens to the blasts of the shofar, he or she is mentally transformed, allowing for heightened cognitive activity. This increase in energy and sharpened attentiveness provides an altered state of consciousness to focus one's thoughts, causing a person to perceive the surrounding world differently. Heightened functioning of the amygdalae allows one to make decisions without detailing nuances. One can also introspect and focus on his/her own undesired past conduct with hopes of future improvement, all with a sense of clarity. Furthermore, with a stimulated hippocampus, all feelings, reflections, and New Year's resolutions are etched in one's long-term memory, ultimately to be carried into the future. The sensitivities that are brought about in this transformed state empower one to make positive changes [4].

To announce a New Year and a jubilee year, to serve as a spiritual wake-up call, to coronate a king, or to instill awe within the Jewish nation, the shofar has served a plethora of roles for the Jewish people. However, an underlying purpose of the shofar is to serve as a way to communicate to the Jewish people. It has served to alert individuals and the nation as a whole. As mentioned in Isaiah (27:13), the shofar will be used to announce entry into the Messianic Era.

Acknowledgements:

I would like to extend my appreciation to Dr. Babich for providing sources for this article, and to Rabbi Shofet and Rabbi Pilichowski for reviewing it. To my dear parents and siblings, thank you for your indefinite support and encouragement.

References:

- [1] Jeruslalem of Gold. www.jerusalemofgold.co.il (retrieved January 14th, 2014).
- [2] Barsheshet Ribak Shofarot of Israel. www.shofarot.com/index.php/. (retrieved January 16th, 2014).
- [3] Ohr Someyach. www.Ohr.edu. (retrieved January 8, 2014).
- [4] Miller, Y.A. "The Science of Shofar." www.aish.com. September 3rd, 2013.