

Listening to the Stars

May 17, 2015

Rev. Jim Magaw

Job 38: 4-7

Where were you when I laid the earth's foundation?

Tell me, if you understand.

Who marked off its dimensions? Surely you know!

Who stretched a measuring line across it?

On what were its footings set,

or who laid its cornerstone—

while the morning stars sang together

and all the angels shouted for joy?

Stars (Mary Oliver)

Here in my head, language  
keeps making its tiny noises.

How can I hope to be friends  
with the hard white stars

whose flaring and hissing are not speech  
but a pure radiance?

How can I hope to be friends  
with the yawning spaces between them

where nothing, ever, is spoken?  
Tonight, at the edge of the field,

I stood very still, and looked up,  
and tried to be empty of words.

What joy was it, that almost found me?  
What amiable peace?

Then it was over, the wind  
roused up in the oak trees behind me

and I fell back, easily.  
Earth has a hundred thousand pure contraltos—

even the distant night bird  
as it talks threat, as it talks love

over the cold, black fields.  
Once, deep in the woods,

I found the white skull of a bear  
and it was utterly silent—

and once a river otter, in a steel trap,  
and it too was utterly silent.

What can we do  
but keep on breathing in and out,

modest and willing, and in our places?  
*Listen, listen, I'm forever saying.*

*Listen to the river, to the hawk, to the hoof,  
to the mockingbird, to the jack-in-the-pulpit—*

then I come up with a few words, like a gift.

Even as now.

Even as the darkness has remained the pure, deep darkness.

Even as the stars have twirled a little, while I stood here,

looking up,

one hot sentence after another.

Something absolutely unique happens when we look up at the night sky and see the stars. There's a sense of awe and wonder, a sense of distance and perspective, a sense of ultimacy--that which is beyond all knowing--and at the same time a sense of intimacy--a very personal experience of meaning or meaninglessness.

For thousands of years, stars have served as navigational points of reference and as sources of some of humankind's deepest myths and stories. Many of these myths and stories have something to do with the singing of the stars or the music of the spheres.

This idea of listening to the stars and the cosmos serves as a point of connection for us in at least three ways:

- First, listening to the stars connects us with our own internal songs--if we can be still enough to hear them.
- Second, this act of gazing and listening connects us with the vastness of space--the sense that, no matter how much we might explore and learn about the stars, they will always point us toward something unknown.
- And, finally, this looking and listening connects us with our ancestors, those who came before us and gazed at the same stars, those who have gone on and whose distance from us is now is something like the distance between us and the stars.

This morning, I'd like to reflect a little bit about each of these three aspects of listening to the stars--how it connects us with ourselves, with that which is ultimately beyond us, and with those who have come before us.

Laurens van der Post was an Afrikaner, a white South African, who became somewhat famous over the course of his life as an author,

journalist and explorer. In the 1950s he produced a BBC documentary series and wrote a book, both titled "The Lost World of the Kalahari."

Through these works, van der Post introduced much of the world to the San people, or Bushmen, of the Kalahari region, in what is now Botswana. Van der Post said that these people, who dwelt in circumstances and in an environment that most people would find unwelcoming, represented the "lost soul of mankind."

Van der Post died at the age of 90 in 1996, after a long and illustrious career. Shortly after van der Post's death, David Wagoner wrote a poem based on one of van der Post's stories about his experiences with the Bushmen. It was called "Silence of the Stars." It reads as follows:

When Laurens van der Post one night  
    In the Kalahari Desert told the Bushmen  
        He couldn't hear the stars  
Singing, they didn't believe him. They looked at him,  
    half-smiling. They examined his face  
        To see whether he was joking  
Or deceiving them. Then two of those small men  
    Who plant nothing, who have almost  
        Nothing to hunt, who live  
On almost nothing, and with no one  
    But themselves, led him away  
        From the crackling thorn-scrub fire  
And stood with him under the night sky  
    And listened. One of them whispered,  
        Do you not hear them now?  
And van der Post listened, not wanting  
    To disbelieve, but had to answer,  
        No. They walked him slowly  
Like a sick man to the small dim

Circle of firelight and told him  
    They were terribly sorry,  
And he felt even sorrier  
    For himself and blamed his ancestors  
        For their strange loss of hearing,  
Which was his loss now. On some clear nights  
    When nearby houses have turned off their televisions,  
        When the traffic dwindles, when through streets  
Are between sirens and the jets overhead  
    Are between crossings, when the wind  
        Is hanging fire in the fir trees,  
And the long-eared owl in the neighboring grove  
    Between calls is regarding his own darkness,  
        I look at the stars again as I first did  
To school myself in the names of constellations  
    And remember my first sense of their terrible distance,  
        I can still hear what I thought  
At the edge of silence where the inside jokes  
    Of my heartbeat, my arterial traffic,  
        The C above high C of my inner ear, myself  
Tunelessly humming, but now I know what they are:  
    My fair share of the music of the spheres  
        And clusters of ripening stars,  
Of the songs from the throats of the old gods  
    Still tending even tone-deaf creatures  
        Through their exiles in the desert.

What is the song of the stars? What does it sound like to us? Are we ever still enough and attentive enough to notice the song?

David Wagoner, in this poem suggests, that it's possible to hear the song of the stars in our own heartbeat and the rush of blood through our veins. And there's something to what he says. The seeming

stillness of the stars allows us to be in touch with something stirring deep within us.

At the same time, we know that the stars are not really cold and motionless, that they are in fact churning masses of burning gas, huge spheres of radiant plasma held together by their own gravity. We know these things through many years of careful scientific observation. These observations have helped us understand more about the stars, but they always seem to point us toward something still unknown.

A group of astronomers from San Jose State University interpret data from NASA's Kepler satellite, which was launched into space in order to search for planets. This search for planets starts with looking at and listening to the vibrations of the stars, and then measuring dips in these vibrations that occur when planets pass in front of the stars.

The Kepler satellite monitors the light from more than 156,000 stars. It turns out that each star emits a unique pattern of vibrations caused by the stars' own internal processes. By studying these patterns, astrophysicists can not only detect planets but they can also glean information about the size and structure and age of the stars.

The astronomers at San Jose State have taken these vibrations and made audio recordings of them, so we can actually hear what one might call the music of the stars. In all honesty, these sounds are not very musical. They are a series of clanks and bangs and whistles--very post-modern, industrial-sounding music.

But each of these songs is unique, as is the pattern of oscillations that each star makes when its vibrations are placed on a chart.

These astronomers noticed that one of the stars they observed--a star rather unromantically named KIC-12253350--produced a very unique pattern of vibrations. In fact, when this star's oscillations are plotted on a graph they form the shape of a heart--like a heart from a valentine.

The scientists who discovered this pattern were so struck by this coincidence that they put this heart-shaped pattern of vibrations on a t-shirt, along with this quotation about the cosmos from Carl Sagan: "For small creatures such as we, the vastness is bearable only through love."

It seems that our observation of the stars always points to something surprising, something that ultimately seems to point back at us.

One night last summer, I was out in the country with a friend. We looked up at the sky and were dazzled by the number of stars. And so we gazed up in silence and listened.

And I started thinking about my grandmother, my Grandma Thompson. It was curious that the stars made me think of her because she was one of the most down-to-earth people I have known. She was the strong matriarch of the family, a hard-working woman who came of age in the Great Depression in rural eastern Kentucky, among the hills and hollers of the Appalachian mountains.

She and my grandfather ran the county poor house, a place for those who had nowhere else to go. And then they moved to southern Ohio, where my grandfather started working at the steel mill, and my grandmother raised six children and cooked and quilted and ploughed and canned and mended and loved everyone fiercely.

She was not a person about whom anyone would say, "She had her head in the stars." She was tough and she was grounded in the dirt, in the



rocky dirt of eastern Kentucky and the soft clay of southern Ohio. Why then did she come to mind as I gazed up at the stars?

And then I remembered something I'd once learned: that many of the stars we see in the sky are dead. They died and were extinguished, in some cases, tens of thousands of years ago, but their light is reaching us only now.

And I realized in that moment that my grandmother—and all of our ancestors—are like those stars. Their time came and went. But the light they produced reaches out across the ages like the songs of the stars--so distant and yet so near.

There's a link between our own heartbeat and internal jangling sounds and the voices of our ancestors. And that link can be found in the music of the stars. Mary Oliver tells us again and again to listen. Listen to all and listen deeply, especially to the natural world.

The distance between us and the stars is vast in the coldness of space. And yet their light still reaches us. And if we are fully present to the light of the stars, we might hear them sing. And sometimes, through the singing of the stars, we, the tone-deaf inheritors of this world, might hear the songs of our ancestors.

"For small creatures such as we the vastness is bearable only through love."

I pray that we might learn to look and look again and listen to the stars.

May it be so. Amen.