

“Algorithms of Beauty”

Sermon by Rev. Joan Javier-Duval

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Unitarian Church of Montpelier

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Reading

“On Beauty” by Khalil Gibran¹

And a poet said, Speak to us of Beauty.

And he answered:

Where shall you seek beauty, and
how
shall you find her unless she herself be
your
way and your guide?

And how shall you speak of her
except
she be the weaver of your speech?

[...]

All these things have you said of beauty,

Yet in truth you spoke not of her but
of needs unsatisfied,

And beauty is not a need but an
ecstasy.

It is not a mouth thirsting nor an
empty hand stretched forth,

But rather a heart enflamed and a
soul enchanted.

It is not the image you would see nor
the song you would hear,

But rather an image you see though
you close your eyes and a song you
hear though you shut your ears.

It is not the sap within the furrowed
bark, nor a wing attached to a claw,

But rather a garden for ever in bloom
and a flock of angels for ever in flight.

People of Orphalese, beauty is life
when life unveils her holy face.

But you are life and you are the veil.

Beauty is eternity gazing at itself in a
mirror.

But you are eternity and you are the
mirror.

¹ <https://www.poetryfoundation.org/poems/148571/on-beauty-5bff0f2d45329>

Sermon

Last Sunday, as part of the “Question Box” sermon, someone posed the question, “Why does beauty exist?”

On the face of it, this seems to me to be a rhetorical question, a question without a real answer.

Why? I’m not sure why, but I sure am glad it does.

And, really, what I’m grateful for, is the human capacity to recognize beauty. Our ability to be stopped in our tracks by a tulip in full bloom or to have our hearts and spirits stirred by a single note of music. When we recognize beauty, it just fills us with such unencumbered joy.

Beauty is a balm to the soul. And, in these troubled times of political corruption, continual gun violence, inhumane immigration policies, and escalating climate disruption, our souls need the soothing salve of beauty.

I am also grateful for the human capacity to draw out beauty in artistic creations borne from our own minds and hands.

The nature mandalas that were shown as the service began are a lovely example of this. It is a wondrous thing that the human mind can take elements from nature and turn them into patterned creations with diverse forms and structures that make you catch your breath or just smile in delight. Beauty.

About a month or so ago, as I was driving back from Burlington, I turned the radio on and caught an interview with Dan Tepfer.

Dan Tepfer is a pianist and composer. He is also a coder, that is a computer programmer.

He was being interviewed as part of a program looking at art that is made with artificial intelligence.

For Tepfer, this means crafting his music with the use of computer programming. He has constructed a computer-enhanced grand piano, a Yamaha Disklavier, which is a

contemporary player piano. What he plays is being sent into the computer in his piano. The computer is programmed to respond by sending data back to the piano which then plays keys on its own.

Tepfer has programmed his piano with eleven different algorithms, or sets of rules. In one, the piano is given an axis of symmetry so that what gets played back is the inverse of what he plays.²

I'm sure for some people here that all makes a lot of sense and for others it just makes you scratch your head. (I'm more in the latter category.)

The result, though, as we heard and saw in the video is something surprising, intriguing, and that I find almost unexpectedly beautiful.

The music in the video was improvised as it was recorded in a single take. The shapes are exact representations of the harmonic ratios of the chords played by his left hand. The computer generates the visual representations in real time in reaction to the music. And, along with programming his piano, Tepfer also created a computer program that generates these shapes.³

Perhaps it is because I am not a musician that I am just completely floored by Tepfer's craft and creative process. I mean, how does someone come up with this stuff?

In hearing about Tepfer's approach to music, I also found myself initially kinda stumped. How could anything of beauty come out of a computer program?

Especially here in Vermont, I think that we are particularly drawn to the beauty of the natural world and to organic forms. The use of computers or artificial intelligence may seem like a strange source of beauty.

Tepfer makes the point that what he's doing is in line with how music has been composed for hundreds of years - with the imposition of strict rules to the creative process. It just so happens that the contemporary technology he is using as one of his tools or instruments is a computer and not just his piano.

² "These Creatives Work Together With Algorithms And Robots To Make Their Art," <https://www.wbur.org/onpoint/2019/04/22/artificial-intelligence-art-music-dan-tepfer-robbie-barrat>.

³ Dan Tepfer's Natural Machines Ep. 2: TriadSculpture, <https://www.youtube.com/watch?v=ldgz85YS70o>

Reflecting on the creative process of classical musicians he says this, "If you look at medieval composers like [Johannes] Ockeghem, Baroque classical composers like Bach, their music lives at the intersection of the algorithmic and the spiritual. Equal parts rules, and equal parts intuition and, for lack of a better word, spirituality."⁴

Spirituality seems to me, though, to be just the right word.

We often use the word spirituality to point to the inexplicable or the incomprehensible, to the mysterious at work in our lives and in the world. And, here, I think Tepfer, is trying to point to the mysterious interconnection of rules and intuition to create something beautiful. And this something beautiful is present in the meeting of human and machine in the creation of improvised music together.

Most of us in this room are not world class pianists or composers, though we are certainly in the company of some very talented musicians including our own Music Director and Pianist. Yet, many of you are artists in your own right - here we have painters and poets and photographers. And all of us, whether we consider ourselves "artists" or not, have the capacity to engage in the creative process.

And, with that capacity to create, I wonder, is it possible to "program" beauty into our lives?

Now, I'm getting a bit more metaphorical - I don't expect all of you to leave here and go home and start writing computer codes for beauty. But I wonder, can we approach our engagement with beauty as a discipline? Can we create "rules" or processes in our own lives that lead us to beauty? Can we notice the patterns of beauty in our own life?

I think in this season of gardening that has now begun in earnest many of us engage in a certain set of rules in order to produce beauty. You may cultivate a bed of perennial flowers knowing just which ones to choose for the amount of light in that particular spot in your garden or learning when it's time to divide up the lilies and move them around. With gardening, you learn the natural "rules" and processes that will produce certain results and then act accordingly.

⁴ "Pianist And Coder Dan Tepfer Composes Music With The Help Of Artificial Intelligence," <https://www.npr.org/2019/05/07/721172186/pianist-and-coder-dan-tepfer-composes-music-with-the-help-of-artificial-intellig>.

This process is one that I know many of you enjoy. And, we all benefit here from the way our church garden has been lovingly and creatively designed and tended.

What I see in this love of gardening is our need and our ability to manipulate the world around us to create beauty. I don't mean manipulate in a nefarious way - simply influencing and shaping our environment to create beauty that delights and enlivens.

And, like with Dan Tepfer's creative process, I think there is at work both rules and intuition and what emerges can be the spiritual. The inexplicable, the mysterious - a connection with a deep, inner joy.

The creative process itself, and not just its end product, is beautiful. The process draws out beauty from within each of us - our own delights and passions, the beauty of following the spark of an idea and giving it concrete form and shape and sound. One of the things that is most notable in the interviews of Dan Tepfer that I listened to was just how much joy he takes in his craft and artistry.

Beauty, whether it emerges from our engagement with instruments or machines or with the natural world, draws us towards goodness and our own sources of happiness.

We both witness beauty and create beauty. Both the witnessing and the creating are practices. The practice in both cases is to allow ourselves the beauty. To give it space and time. To pause enough in the busy, whirlwind of our lives to allow ourselves to recognize beauty and also to create beauty.

A lovely moment of making space for recognizing the awe of created beauty happened earlier this month at Boston Symphony Hall.⁵ The Handel & Haydn Society had just finished their rendition of Mozart's Masonic Funeral when a young child in the crowd blurted out: "Wow!" The group was so moved by the child's reaction that they went on a search for the "Wow Child" and discovered that it was a nine year-old, Ronan Mattin, who had attended the concert with this grandfather, Stephen Mattin. The society will be inviting Ronan back to hear them when they open their season in October.

⁵ "Orchestra Finds N.H. Boy Who Charmed Crowd With 'Wow!'" May 11, 2019, <https://www.nhpr.org/post/orchestra-finds-nh-boy-who-charmed-crowd-wow#stream/0>.

This ability to be “wowed,” to create, recognize, and make space for beauty puts us in touch with what it is to be human and to yearn for that ever expanded sense of humanity embedded in life.

Beauty is also a necessary balance to the other side of life - the immense suffering that we witness and that we experience. With the concern that we hold for the ill treatment of our planet and one another, beauty is actually a key value.

The religious studies scholar, Alison Downie, writes, “[T]he intertwined devastation of the Earth and dehumanizing living conditions for the most vulnerable people...are morally and aesthetically ugly. Both justice and beauty are violated when what is inherently valuable is devalued, defaced, or destroyed...Attending to the power of beauty is thus not escapist; instead, it is a resource for maintaining and renewing commitment to life, grounded in gratefulness.”⁶

Beauty is a resource for maintaining and renewing commitment to life, grounded in gratefulness.

Returning to the question posed to me last week: Why does beauty exist?

Perhaps, this is why. To inspire us to renew our commitment to life. Life with its moments of unexpected discovery, immense delight, unimaginable pain, and yet, wonder, love, and goodness.

As Khalil Gibran writes, “[B]eauty is life when / life unveils her holy face.”

May we seek, find, and create beauty
so that we come to know the holy face of life
again and again.

⁶ As quoted in “Ecotheology,” Sheri Prud’homee, *Justice on Earth: People of Faith Working at the Intersections of Race, Class, and the Environment* (Boston: Skinner House Books, 2018) p. 33.