The Neuroscience of Poetry

The Music of Poetry
Poetry and music are more closely related than we think

—Cerys Matthews

The Welsh word “cerdd” can be translated as either “verse” or “music”. It covers both meanings, because, as we know from history, when the great bards were performing their poetry it would be accompanied by music.

The two were always intertwined and music, poetry, spoken word and performance have been a part of our society for centuries.

The festivals called “eisteddfod” combine literature, music and poetry. These cultural competitions were not just for the rich or educated, but were held in pubs and other meeting places and brought everyone together.

They are part of an oral tradition entrenched in Welsh society as it is in many other cultures: The Somali tradition of oral storytelling or praise poetry in India and Pakistan.

The Guardian
Let’s Take it Back a Little Farther

Melodies and Rhythms probably preceded words.

The first steps of poetry were fitting words into pre-existent musical patterns.

Primitive cultures made no distinction between music and poetry.

The Egyptian “Hymn of Seven Vowels” exploited the overtone pitches present in the vowels of any language.
In Egypt the priests, when singing hymns in praise of the gods, employ the seven vowels, which they utter in due succession; and the sound of these letters is so euphonious that people listen to it in preference to flute and lyre.

A, E, H, I, O, U, Omega.
The Greek system of pitch accents in poetry was similar to the tetrachordal system of Greek music.

2nd century AD the accents and breathings appeared sporadically in the papyri.

Greeks used the same word *mousike* to describe dance, music, and poetry. Later, rhetorical theory was added to the meaning.

A musical notation was created for poetry, using letters above the vowels to indicate the desired pitches in the voice.
Leading eventually to the evolution of the treble cleft
Medieval poets and musicians influenced by Greek Numerological Theory in which the universe was created and ordered by numbers, frequently constructed their pieces using mystical and mathematical formulae.
The poems of the Troubadours were written without a specific music in mind but the poetic form became sufficiently demanding to occupy one’s attention without fitting into a musical form.

Now, musicians were called upon to write music to accompany pre-existing words.

The poetic form became more complex than the music form.

The Troubadours
1100 - 1350

Poetry was altered by the Troubadours who produced extensive stanzatic forms and complicated rhyme schemes that changed the face of poetry.
The early Christian fathers still banned instrumental music from the church in favor of the mathematical theory of music based on the ancient world. But despite resistance, the music increasingly included the contribution of poets into the chants during liturgy. The result more closely resembled modern poetry.
Branch Points

1200 BC Egyptian	Epics, Comedies, Tragedies
384 BC Aristotle	Ballad
1000 Beowolf	Sonnet
1360 Chaucer	Sestina
1455 Guttenberg Bible	Villanelle
1564 Shakespeare	Triolet

(It gets complicated)

1841 Lieder

Free Verse
Die Ehre Gottes aus der Natur

Ludwig van Beethoven

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“Poets who will not study music are defective.”

Ezra Pound
How Do Poets Make Music?

You can’t reach into the pantry for a cup of tone.
—James Logenbach

Consider Ezra Pound’s “In a Station of the Metro.”

The apparition of these faces in the crowd;
Petals on a wet, black bough.

In the first line, the multisyllabic word apparition is pronounced Appa-ri-tion — two unstressed syllables followed by a stressed syllable and an unstressed syllable. The subsequent function words (of, these, in, the) aren’t generally stressed in an English sentence unless something directs us to do so. Tension between syntax and line may produce that direction —

The apparition of these faces in
The crowd
Pound’s poem offers no such direction, leaving us to stress the more semantically charged nouns, as the function words fall away.

The apparition of these faces in the crowd;

Since the nine unstressed syllables in this line are broken into three groups of three, each group followed by a stressed syllable, it seems the poem may possibly be establishing a regular rhythmic pattern, one that might be repeated — ti ti ti tum ti ti ti tum ti ti ti tum. We won’t know if that’s true, however, until we listen to the second line.

Petals on a wet, black bough.

This density of stressed syllables feels emphatic in itself, and the density is reinforced by the rhyme of “wet” with the first syllable of “petals,” the alliteration of “black” with “bough,” and, most importantly, by the way in which the second line’s irregular rhythm (tum ti ti ti tum tum tum) disrupts the regularity of the first (ti ti ti tum ti ti ti tum ti ti ti tum). The whole poem delivers us into the concluding triplet of stresses, transforming what would otherwise be a disposable observation into a thrillingly repeatable event.
What Makes the Music in Poetry?

Rhythm

Metrical foot:  
- Iamb
- Trochee
- Anapest
- Spondee

Accentuated Syllables

Pauses/Cesuras

**METRICAL FOOT**

- *Meter* means “measurement,” a metrical foot is a set of syllables, usually two or three, with only one receiving a strong stress.
The Metrical Foot is a group of two or three syllables forming the basic unit of poetic rhythm.

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The Lamb

i sing of Olaf glad and big
whose warmest heart recoiled at war
a conscientious object-or

e e cummings
“Metrical Feet” by Samuel Coleridge

/ u / u / u /  
- Trochee trips from long to short
  u / u / u / u /
- From long to long in solemn sort
  / / / / / / / / / / u
- Slow spondee stalks; strong foot yet ill able

- Ever to run with the dactyl trisyllable.
- Iambics march from short to long.
- With a leap and a bound the swift anapests throng.

The Extra Musical Effect
Of Accented Syllables

Table 4: Classification of Rhythmic Metre

<table>
<thead>
<tr>
<th>poetry</th>
<th>metrical foot</th>
<th>musical notation</th>
</tr>
</thead>
<tbody>
<tr>
<td>trochee</td>
<td></td>
<td></td>
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<tr>
<td>lamb</td>
<td></td>
<td></td>
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<td>dactyl</td>
<td></td>
<td></td>
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<td>anapest</td>
<td></td>
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<td>spondee</td>
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<td>tribach</td>
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</tbody>
</table>

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The accent does more than just accent
It changes The Rhythm
... And For Your Entertainment!
William Carlos Williams rejected all form in poetry.

He tried to break down the iambic line and invented a substitute which he called measure. Poetry he says, is based on measure which is something like “the natural and subtly varying rhythms of the spoken voice, based on the natural rhythms of breathing...”

His contribution lay in creating a specifically American poetics based on the rhythm and colorations of American speech, thought and experience.
What Makes the Music in Poetry?

Rhythm

Metrical foot: Iamb

Spondee

Trochee

Anapest

Accentuated Syllables

Pauses/Cesuras

Sound

Harmonies and Harmonics

Pitch Variations

Phoneme Choices

Unity of Effect

Front & Back Vowels

Consonants

So Moving On

Remember This Guy?
What Makes the Music in Poetry?

Rhythm
- Metrical foot: Iamb
- Accentuated Syllables
- Pauses/Cesuras

Anapest
Spondee
Trochee
Pauses/Cesuras

Sound
- Harmonies and Harmonics
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Rhyme and Repetition
- End Rhyme
- Slant Rhyme
- Internal Rhyme
- Rich Rhyme
- Distant Rhyme
- Eye Rhyme

Rhythm is the pulse of poetry. Rhyme is its echo.
Rhyme links and unifies lines, emphasizes words, adds fluency to the poem.
Types of Rhymes

End Rhymes

Under my window, a clean rasping sound
When the spade sinks into gravelly ground

Internal Rhymes

Once upon a midnight dreary, while I pondered, weak and weary,
Over many a quaint and curious volume of forgotten lore,

Slant Rhymes

Between my finger and my thumb
The squat pen rests; snug as a gun

Rich Rhymes

Partake the fire divine that burns,
In Milton, Pope, and Scottish Burns,
Who sang his native braes and burns.

Eye Rhymes

Shall I compare thee to a summer’s day?
Thou art more lovely and more temperate:
Rough winds do shake the darling buds of May,
And summer’s lease hath all too short a date:

These are mostly **end rhymes.**

Distant Rhymes happen **anywhere**
Repetition

Why Repetition?

. . . The second time goes deeper.

Or calling a child

We do it reading a newspaper

Because. . . .

The meaning comes cleaner

Robert Bly will pause sometimes in the middle of reading a poem to repeat a line

It pounds deeper into consciousness
Kinds of Repetition

**Word**

As of someone gently rapping, rapping at my chamber door
—Poe

These woods are lovely, dark, and deep
But I have promises to keep
And miles to go before I sleep
And miles to go before I sleep
—Frost

(All that stuff we did
on Sound Symbolism)

**Line**

**Sound**

When two plates of earth scrape along each other like a mother and a daughter/it is called a fault.
There are faults that slip smoothly past each other an inch an year, with just a faint rasp
like a man running his hand over his chin/that man between us
and there are faults that get stuck at a bend. . . —Sharon Olds

**Ideas**
What Makes the Music in Poetry?

**Rhythm**
- Metrical foot: 
  - Iamb
  - Spondee
  - Trochee
- Accentuated Syllables
- Pauses/Cesuras

**Sound**
- Harmonies and Harmonics
- Pitch Variations
- Phoneme Choices
- Unity of Effect
- Front & Back Vowels
- Consonants

**Rhyme and Repetition**
- End Rhyme
- Internal Rhyme
- Slant Rhyme
- Eye Rhyme
- Rich Rhyme

**Change of Pace**
- Line and Stanza Breaks
- Interruptions
- Enjambment
- White Space

**Unity of Effect**
Interruptions and Pauses

- Line Breaks
- Enjambment
- Regular vs. Irregular
- Philip Levine a Limerick & Dickinson
This and That

(Line Breaks)

Philip Levine

April, and the last of the plum blossoms
scatters on the black grass
before dawn. The sycamore, the lime,
the struck pine inhale
the first pale hints of sky.
An iron day,
I think, yet it will come
dazzling, the light
rise from the belly of leaves and pour
burning from the cups
of poppies.

An Old Limerick

There was an old person of Fife,
Who was greatly disgusted with life;
They sang him a ballad,
and fed him on salad,
Which cured that old person of Fife.

Dickinson

Never for Society
He shall seek in vain --
Who His own acquaintance
Cultivate -- Of Men
Wiser Men may weary --
But the Man within

Never knew Satiety --
Better entertain
Than could Border Ballad --
Or Biscayan Hymn --
Neither introduction
Need You -- unto Him --
Interruptions and Pauses

{Line Breaks
  Regular vs. Irregular

Enjambment

Philip Levine
  a Limerick
  & Dickinson

Line Lengths

{Williams
  vs.
  Whitman

Philip Levine & Dickinson
so much depends
upon
a red wheel
barrow
glazed with rain
water
beside the white
chickens.

I CELEBRATE myself, and sing myself,
And what I assume you shall assume,
For every atom belonging to me as good belongs to you.

I loafe and invite my soul,
I lean and loafe at my ease observing a spear of summer grass.

My tongue, every atom of my blood, form'd from this soil,
this air,
Born here of parents born here from parents the same, and
their parents the same,
I, now thirty-seven years old in perfect health begin,
Hoping to cease not till death.
GARY SNYDER

THE HUDSONIAN CURLEW

The end of a desert track—turnaround—
parked the truck and walked over dunes.
a cobbly point hooks in a shallow bay;

the Mandala of Birds.

pelican, seagulls, and terns
one curlew
far at the end.
they fly up as they see us
and settle back down.
tern keep coming
—skies of wide seas—
frigate birds keep swooping

pelicans sit nearest the foam;
tern bathing and fluttering
in frothy wave-lapping
between the round stones.
we
gather driftwood for firewood
for camping
get four shells to serve up steamed snail

§
Effects these Elements Have

**Meter**
- Moves the poem along or slows it down
- Emphasizes the important, emotional aspects
- Lulls and seduces
- Makes you pay attention
- It sings to you

**Rhyme and Repetition**
- Contributes rhythm
- Highlights and Recalls
- Forms a network of interconnectedness

**Sound**
- Unifies the poem
- Anchors memory
- Connects with the Emotional Currents
- And hidden ancestral meanings

**Change of Pace**
- Interrupts Monotony
- Places unexpected emphasis
- Forces you to pause, giving time to sink in

**Unconscious**
- Something More ???

**Voice**
- Friction
The New Colossus
—Emma Lazarus

Not like the brazen giant of Greek fame, (a)
With conquering limbs astride from land to land; (b)
Here at our sea-washed, sunset gates shall stand (b)
A mighty woman with a torch, whose flame (a)
Is the imprisoned lightning, and her name (a)
Mother of Exiles. From her beacon-hand (b)
Glows world-wide welcome; her mild eyes command (b)
The air-bridged harbor that twin cities frame. (a)
'Keep, ancient lands, your storied pomp!' cries she (c)
With silent lips. 'Give me your tired, your poor, (d)
Your huddled masses yearning to breathe free, (c)
The wretched refuse of your teeming shore. (d)
Send these, the homeless, tempest-tost to me, (c)
I lift my lamp beside the golden door. (d)
Pied Beauty

—Gerard Manly Hopkins

Glory be to God for dappled things—
For skies of couple-colour as a brinded cow;
For rose-moles all in stipple upon trout that swim;
Fresh-firecoal chestnut-falls; finches’ wings;
Landscape plotted and pieced—fold, fallow, and plough;
And all trades, their gear and tackle and trim.

All things counter, original, spare, strange;
Whatever is fickle, freckled (who knows how?)
With swift, slow; sweet, sour; adazzle, dim;
He fathers-forth whose beauty is past change:
Praise Him.
The Lake Isle of Innisfree

—Y. B. Yeats

I will arise and go now, and go to Innisfree,
And a small cabin build there, of clay and wattles made:
Nine bean-rows will I have there, a hive for the honey-bee;
And live alone in the bee-loud glade.

And I shall have some peace there, for peace comes dropping slow,
Dropping from the veils of the morning to where the cricket sings;
There midnight’s all a glimmer, and noon a purple glow,
And evening full of the linnet’s wings.

I will arise and go now, for always night and day
I hear lake water lapping with low sounds by the shore;
While I stand on the roadway, or on the pavements grey,
I hear it in the deep heart’s core.
All the new thinking is about loss. In this it resembles all the old thinking. The idea, for example, that each particular erases the luminous clarity of a general idea. That the clown-faced woodpecker probing the dead sculpted trunk of that black birch is, by his presence, some tragic falling off from a first world of undivided light. Or the other notion that, because there is in this world no one thing to which the bramble of blackberry corresponds, a word is elegy to what it signifies. We talked about it late last night and in the voice of my friend, there was a thin wire of grief, a tone almost querulous. After a while I understood that, talking this way, everything dissolves: justice, pine, hair, woman, you and I. There was a woman I made love to and I remembered how, holding her small shoulders in my hands sometimes,
I felt a violent wonder at her presence
like a thirst for salt, for my childhood river
with its island willows, silly music from the pleasure boat,
muddy places where we caught the little orange-silver fish
called pumpkinseed. It hardly had to do with her.
Longing, we say, because desire is full
of endless distances. I must have been the same to her.
But I remember so much, the way her hands dismantled bread,
the thing her father said that hurt her, what
she dreamed. There are moments when the body is as numinous
as words, days that are the good flesh continuing.
Such tenderness, those afternoons and evenings,
saying blackberry, blackberry, blackberry.

— Robert Hass
... non-sense is not vacuity of sense: it is a parody of sense, and that is the sense of it.

—Eliot
Even in approaching the poetry of our own language, we may find the classification of meters, of lines with different numbers of syllables and stresses in different places, useful at a preliminary stage, as a simplified map of a complicated territory: but it is only the study, not of poetry but of poems, that can train our ear. It is not from rules, or by cold-blooded imitation of style, that we learn to write: we learn by imitation indeed, but by a deeper imitation than is achieved by analysis of style.
Langston Hughes - "The Weary Blues" on CBUT, 1958
5 years ago
youtube.com
Langston Hughes Weary Blues
7 years ago
youtube.com
Now Playing
Married Blues
Kenneth Rexroth
Winter Poem

Robert Bly
You may think
You know
This person
Three Moves
—John Logan

Three moves in sixth months and I remain the same.
Two homes made two friends.
The third leaves me with myself again.
(We hardly speak.)
Here I am with tame ducks
and my neighbors’ boats,
only this electric heat
against the April damp.
I have a friend named Frank—
the only one who ever dares to call
and ask me, “How’s your soul?”
I hadn’t thought about it for a while,
and was ashamed to say I didn’t know.
I have no priest for now.
Who
will forgive me then. Will you
Tame birds and my neighbors’ boats.

The ducks honk about the floats . . .
They walk dead drunk onto the land and grounds,
iridescent blue and black and green and brown.
They live on swill
our aged houseboats spill.
But still they are beautiful.
Look! The duck with its unlikely beak
has stopped to pick
and pull
at the potted daffodil.

Then again they sway home
to dream
bright gardens of fish in the early night.
Oh these ducks are all right.
They will survive.
But I am sorry I do not often see them climb.
Poor sons-a-bitching ducks.
You’re all fucked up.
What do you do that for?
Why don’t you hover near the sun anymore?
Afraid you’ll melt?
These foolish ducks lack a sense of guilt,
and so all their multi-thousand-mile range
is too short for the hope of change.