Forms: crystalline, and fluid

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Emily Galvin's poems, in *Do The Math*, are written in forms that have the grace of being intensely crystalline—in a way that I will describe in a moment—and yet these crystals, by their very nature, enact an organic unfolding.

Her poems are often in the guise of dramatic encounters, complete with stage directions. Many of them are dialogues recollecting missed opportunities, the loss made almost irrelevant by the exquisiteness of the recollection itself. Some poems consist entirely of stage directions; the actors missing, yet the implied action all the more arresting; the stage manager patient:

> If there could be a little wind, that would be nice.

Love, of course, is what collects like evening dew on all these poems, and when it glistens in a full moon, is

> like something seen once and never seen again—blue heron, sandhill crane

and is as surprising as the lover's "toenails full of sand."

These poems, as theater—as minute-long plays—often with a stage right and stage left, and lighting—force a majestic tempo to their reading. Galvin delights in the extraordinarily rich arithmetic of her novel poetic forms, making full use of the interplay between their *crystalline* and *organic* nature.

But all poetry banks on this interplay. The challenge, when you read Thomas Gray's opening line to *Elegy Written in a Country Churchyard*,

> The Curfew tolls the knell of parting day,

is, on the one hand, to keep from tumbling into the deep groove of its intoning meter; and on the other, to respect, and not conceal, its music.

The line just quoted is in iambic pentameter, of course, the *iamb* consisting of a short syllable followed by a long syllable, ($\cup$ $-$) and we will soon discuss the various meanings of “short” and “long.” But, whatever they mean, the template for the full line is

$$\cup\ -\cup\ -\cup\ -\cup\ -\cup\ -$$

When you label a line of poetry as *iambic pentameter* you are signalling, right there, a certain tension. The *pentameter* part of the description offers us up a clean number: five. That is, the line is thought to have 5 iambic feet. The *iamb* part of it, though, gives us a continuum of choices; for the combination ”short-long” is a relative notion: whether the “short” part of the iamb measured against the “long” is in terms of duration, or stress, or a mixture, is unspecified in our description. There is, in English or in any other language, no *perfect iamb* and even if there were, giving it five occurrences in the same line of poetry would stultify. A line like

I summon up remembrance of things past

has no two of its five feet in quite the same iambic mold, and so is heard as in counterpoint with some ideal iambic pentameter *ta-dum ta-dum ta-dum ta-dum ta-dum.* This “ideal” can never, and—of course—should never, be realized.

We already have, then, in this staple metrical form *iambic pentameter* a marriage between the *discrete* (i.e., 5) and the *continuous* (i.e., the panoply of possible iambs). Discrete elements of poetical form I’ll call *crystalline*, while continuous elements I’ll call *fluid.* Line length in free verse is a somewhat fluid element of its form; the syllable count in Haiku is crystalline.

One of the evident differences between the crystalline and the fluid aspects of poetic form is in the manner of their evolution. We expect constant change, within the same poem, perhaps even within the same line, of the fluid; but any change in the crystalline signals either a specific shattering of something or other within the particular poem, or else arises from some shift of grand tradition. The curtal-sonnets of Gerard Manley Hopkins, for example, with their $6 + 4 = 10$ lines and their half-line tails represents a cleanly marked departure from the usual proportion of the crystalline form of octave and sextet in the usual $8 + 6 = 14$ line sonnets.

Is there some specific innate repertoire of crystalline forms within which poems can be written that have the power, if used well, to move us to tears, while other forms inevitably leave us cold? I think not; I think there is no limit; I think that any crystalline form suggests its (possibly slow, cultured) unfolding into something rich. Can you fashion, for example, a crystalline form out of a sequence of numbers as unprepossessing as

$$7, 10, 6, 6, 8, 12, 6?$$

Well, Marianne Moore built her poem *He “Digesteth Harde Yron”* out of it, or, at least, starting from its mold. Here is the first stanza:

Although the aepyornis
or roc that lived in Madagascar, and

the moa are extinct,
the camel-sparrow, linked
    with them in size—the large sparrow
Xenophon saw walking by a stream—was and is
a symbol of justice.

The sequence $7, 10, 6, 6, 8, 12, 6$ are the number of syllables in each line, the two six-syllable lines being linked by an end-rhyme. This numerical pattern is repeated with very small variation and minimal, but elegant, evolution in the nine stanzas of her poem so that it acquires emotional force, stanza by stanza. By the end of the poem, the last two lines of which are

This one remaining rebel
is the sparrow-camel.

you think of the very crystalline form of her poem as standing for the skeletal architecture of this beast, sparrow or camel.

There are two major forms that Emily Galvin works with; I'll refer to them by the names of two mathematicians, *Fibonacci* and *Euclid.*

Fibonacci (alias: Leonardo of Pisa) considered the interesting mathematical structure that arises if you were to have a community of creatures ("Fibonacci rabbits" they are fondly called) that procreated at a rate so that the number of individuals in each generation was the sum of the number of individuals of the two previous generations. So we have the sequence

$$1, 1, 2, 3, 5, 8, 13, \dots$$

of successive census counts, where the initial $1, 1$ represents the "Adam" and "Eve" of Fibonacci rabbithood. Galvin's poems in the *Fibonacci* form consist—most of the time—of a dialogue between—say—"A" and "B," two characters sketched in an economy of pen strokes, about whom we know vividly perhaps only two things; namely,

- how *well* A knows B, and B knows A,
- how *little* A and B know each other.

and where, in their dialogue, each successive comment of A, or of B, is a distillation or a combination, or a refutation, or a glancing comment on, no more than the two previous lines of their interchange. The form, then, is elegantly focussing on how a shared understanding builds between them, and yet how it never does. Almost in emotional contradiction to all this, however, a Fibonacci-like energy pulses in the (pro-)creation of their dialogue. This is trenchantly enacted in the very form (the "math") of their speech, either in the pattern $1, 1, 2, 3, 5, 8, 13, \dots$ of the number of words in a line, or the number of words in the sentences (taking into account that they sometimes finish each other's sentence) or in the stanza structure of their conversation.

Euclid began and ended Book VII of his *Elements of Geometry* by discussing a process—now known as *the Euclidean Algorithm*—where, starting with two numbers A and B, via successive operations of *subtraction*, you can arrive at a determination of *the* largest number C that is a divisor of A and of B (a *greatest common divisor* of A and B)[1].

In Emily Galvin's *Euclidean Algorithm* poems, the interlocutors A and B refine their utterances, successive subtractions being the mode of propulsion of their dialogue, and "the math" drives them on to a common distillation.

A cornucopia of still other mathematical elements glisten through the poetry: the stately, yet ornery, sequence of prime numbers $2, 3, 5, 7, 11, 13, \ldots$ quietly forming the background of spaces between words in one poem, a spiral entwining another. And, as is true of mathematics, all of Galvin's work—fluid and crystalline—is in the service of passion.

[1]For example, the greatest common divisor of 18 and 12 is 6; in this simple instance *the Euclidean Algorithm* boils down to telling you simply to subtract 12 from 18 to get the answer. But if you applied the Euclidean algorithm to get the greatest common divisor of, say, 4001 and 691, the Euclidean algorithm would have you perform a hefty number of subtractions to get the answer (which happens, by the way, to be 1).