On November 19, 2010, I attended a talk by Lee Ann Brown, opening a workshop celebrating the 50th anniversary of Oulipo, held at the University of North Carolina at Asheville. In this talk she mentioned that she is fascinated by dodecahedra, as well as by constrained poetry.

Shortly thereafter, I composed this piece describing how one might walk around the vertices of a dodecahedron, selecting words written on the edges of the dodecahedron to use in a constrained poem.

**Walking The Dodecahedral Trail**

\begin{quote}
Words on an edge,
Walking the dodecahedral trail.
Encounter vertices, nodes.
Make a choice,
To turn left or right,
Writing down discoveries,
Surprise conjunctions,
And finding once only
Read poems.
\end{quote}

There are thirty distinct words in this piece, corresponding to the thirty edges of a dodecahedron.

I then constructed a PHIZZ units dodecahedron (see Tom Hull's lovely book Project Origami), and wrote one word on each unit. I used three units of each of yellow, green and orange, and randomly constructed the dodecahedron from the units, subject to the constraint that any two of the colours form a hamilton cycle through all the vertices (this is the solution to the original problem posed by Hamilton in 1859).

Next, I randomly selected an edge, the word "right", and a direction along which to traverse it: and then I wrote down a sequence of choices to make, RLRL LRLR RLRL. I followed this from the edge "right", turning right or left as the sequence indicated, obtaining the following sequence of words:
I decided to use these as the first words of each line of a poem, and composed the following.

**Right Surprised**

*Right surprised we are, we are,*  
*Surprised as hell, surprised as well.*  
*Turn the eye to see afar,*  
*Read the words the ball will tell.*  
*Discoveries astound us still:*  
*on finding ideas in the air,*  
*Poems emerge from hidden will.*  
*Walking, turning, here to there,*  
*To wander, maybe to explore*  
*Dodecahedral skeletal ball.*  
*Choice is made, and made once more:*  
*Once made, it cannot change at all*  
*Left or right until the end.*

As a final observation, note the rhyming scheme is such that the final phoneme of each line follows the pattern  
**RLRL LRLR RLRL**  
so that the poem itself encodes the directions in which I turned to obtain the words.