A. The syllable count problem

(1) Some sample problems in English:

<table>
<thead>
<tr>
<th>sequence</th>
<th>2 syllables</th>
<th>1 syllable</th>
</tr>
</thead>
<tbody>
<tr>
<td>ao</td>
<td>aorta [œ]</td>
<td>pharaoh [o]</td>
</tr>
<tr>
<td>ia</td>
<td>zinnia [iɑ]</td>
<td>acacia [a]</td>
</tr>
<tr>
<td>ea</td>
<td>area [iə]</td>
<td>tread [t]</td>
</tr>
<tr>
<td>io</td>
<td>adagio [iə]</td>
<td>action [a]</td>
</tr>
<tr>
<td>oa</td>
<td>coaxial [oæ]</td>
<td>coax [o]</td>
</tr>
<tr>
<td>ai</td>
<td>archaic [eɪ]</td>
<td>afraid [e]</td>
</tr>
<tr>
<td>ui</td>
<td>circuitous [yuə]</td>
<td>circuit [o]</td>
</tr>
</tbody>
</table>

(2) Toward a “linguistic” solution:
   a. morphology, e.g. archaic vs. afraid;
   b. adjacent consonants, e.g. zinnia vs. acacia;
   c. frequency, e.g. circuitous vs. circuit.

(3) As a practical matter, we might be able to get this information more quickly from poetry.

(4) As a theoretical matter, maybe syllable count is learned partially on the basis of nursery rhymes and language games.

B. Fixed meter poetry

(5) Fixed meter poetry is a poetic system where some number of elements (syllables, stresses, moras, etc.) is fixed on a line-by-line basis.

(6) To deal with the issue above, we use syllable counting meters:
   a. iambic pentameter (10 syllables) in English,
   b. cywydd ([kώrθ]; 7 syllables) in Welsh.
(7) Two households, both alike in dignity,
In fair Verona, where we lay our scene,
From ancient grudge break to new mutiny,
Where civil blood makes civil hands unclean.
From forth the fatal loins of these two foes
A pair of star-cross’d lovers take their life;
Whose misadventured piteous overthrows
Do with their death bury their parents’ strife.

_Romeo and Juliet_, Shakespeare

(8) 'Tydi, y bwth tinhwth twn
Rhwng y gweundir a’r gwyndwn,
Gwae a’th weles, dygesynt,
Yn gyfannedd gyntedd gynt,
Ac a’th wîl heddiw’n friw frig,
Dan dy ais yn dî ysig.

_Yr Adfail_ ‘The Ruin’, Dafydd ap Gwilym

(9) 'You, broken bare-arsed cottage
between moor and fallow land,
woe those who saw you, so they think,
as a homely dwelling once,
and who see you today with shattered roof,
a wreck of a house under bare joists.

(10) Resolution and extrametricality:
Thou seest, we are not all alone unhappy:
This wide and universal Theater
Presents more woeful Pageants then the Scene
Wherein we play in

_All the world’s a stage,
And all the men and women, merely Players;
They have their Exits and their Entrances,
And one man in his time plays many parts,
His Acts being seven ages. At first the Infant,
Mewling, and puking in the Nurses arms:

_As you like it_, Shakespeare

C. Algorithm

(11) Principles:
   a. words with more letters have more syllables;
   b. more frequent words are shorter.