A SPECIAL TYPE OF WORD-SHIFT SQUARE

SUSAN THORPE
Great Missenden, Buckinghamshire, England
thorpeds@hotmail.com

In Language on Vacation, p140, Dmitri Borgmann shifted the words of the 3 x 3 square HER – EMU – RUT, letter by letter, 10 steps along the alphabet, looping from Z to A, to make a second square ROB – OWE – BED. Tom Pulliam topped this by shifting the 4 x 4 square BARE – ANER – RENA – ERAR, letter by letter, 13 steps along the alphabet to make the square ONER – NARE – ERAN – RENE (WW76104).

The current article deals exclusively with 3 x 3 squares. Both the above shift exercises involve 2 squares whereas the letter-shifts below occur within a single square. In this context they may perhaps be regarded as ‘internal’ shifts. These particular internal shifts are special in that the letters of the first word each shift n steps to form the second word, and the letters of the second word also shift n steps to form the third word.

To find such special Word-Shift Squares, even of size 3 x 3, it is necessary to incorporate obscure words, and locations.

Unreferenced words can be found in the Oxford English Dictionary, Second Edition.

Aei = part of a pedigree name of a family of Golden Retrievers; Eim = a surname; Zyx = a flea.

Locations, by country, are taken from the United States Board on Geographic Names:

1Brazil 2Algeria 3N.Korea 4Somalia 5Nigeria 6Russia 7Ethiopia 8Papua New Guinea
9Cameroon 10Peru 11Japan 12Burma 13Iran 14France

The shift values are given above the squares.

In the first example the shift value is 1... Y+1 = Z, Z+1 = A, A+1 = B, B+1 = C

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Y</td>
<td>Z</td>
<td>A</td>
<td>E</td>
<td>F</td>
<td>I</td>
</tr>
<tr>
<td>Z</td>
<td>A</td>
<td>B</td>
<td>E</td>
<td>C</td>
<td>G</td>
</tr>
<tr>
<td>A</td>
<td>B</td>
<td>C</td>
<td>D</td>
<td>E</td>
<td>F</td>
</tr>
<tr>
<td>6</td>
<td>7</td>
<td>8</td>
<td>9</td>
<td>10</td>
<td></td>
</tr>
<tr>
<td>C</td>
<td>I</td>
<td>O</td>
<td>U</td>
<td>V</td>
<td>W</td>
</tr>
<tr>
<td>I</td>
<td>O</td>
<td>U</td>
<td>V</td>
<td>W</td>
<td>X</td>
</tr>
<tr>
<td>O</td>
<td>U</td>
<td>V</td>
<td>W</td>
<td>X</td>
<td>Y</td>
</tr>
<tr>
<td>11</td>
<td>12</td>
<td>13</td>
<td>14</td>
<td>15</td>
<td></td>
</tr>
<tr>
<td>I</td>
<td>T</td>
<td>E</td>
<td>C</td>
<td>O</td>
<td>A</td>
</tr>
<tr>
<td>T</td>
<td>E</td>
<td>P</td>
<td>O</td>
<td>A</td>
<td>M</td>
</tr>
<tr>
<td>E</td>
<td>P</td>
<td>A</td>
<td>M</td>
<td>Y</td>
<td>N</td>
</tr>
<tr>
<td>16</td>
<td>17</td>
<td>18</td>
<td>19</td>
<td>20</td>
<td></td>
</tr>
<tr>
<td>O</td>
<td>E</td>
<td>U</td>
<td>J</td>
<td>A</td>
<td>R</td>
</tr>
<tr>
<td>E</td>
<td>U</td>
<td>K</td>
<td>A</td>
<td>R</td>
<td>I</td>
</tr>
<tr>
<td>U</td>
<td>K</td>
<td>A</td>
<td>R</td>
<td>I</td>
<td>Z</td>
</tr>
<tr>
<td>21</td>
<td>22</td>
<td>23</td>
<td>24</td>
<td>25</td>
<td></td>
</tr>
<tr>
<td>J</td>
<td>E</td>
<td>Z</td>
<td>O</td>
<td>L</td>
<td>I</td>
</tr>
<tr>
<td>E</td>
<td>Z</td>
<td>U</td>
<td>O</td>
<td>L</td>
<td>I</td>
</tr>
<tr>
<td>Z</td>
<td>U</td>
<td>P</td>
<td>L</td>
<td>I</td>
<td>F</td>
</tr>
</tbody>
</table>

Z Y X

149
4 STEP SHIFTS

4 letters
CUES - HOAX  CAGE - HULA  HOME - MIRA  WIPE - BETA  NEMO - SARI
CUTE - HOYA  GONE - LISA  PESO - TAXI  MAGI - RULE  DINA - JESU

5 letters
PENCE - TASHA  BAMBI - GURGE  HEXER - MACAW  COGAN - HILUS  HUMAN-MORUS

6 letters
TANNIN - YUSSES (yesses)

CHAINS
Shift chains can also be constructed:

1 step
JAA - KEE - LII - MOO - NUU - PAA
LUKE - MALI - NEMO

2 step
FOK - HAM - KIP - MUR - PET - ROW - TAY
MOK - PAM - RIP - TUR - WET - YOW - BAY - DIB - GUD - JEG
PEEK - ROOM - TAAP (Chambers)

3 step
The meaningful DIP - HAS - LOW
Here is an all-location chain:
D1QA (Benin) - HAKO (Japan) - LONE (Australia) - PERU - SUVI (Azerbaijan) - WIYA (Micronesia)

4 step
CAZ - HUF - MCK - RIP - WET - BAY - GUD (5 of these are alternate words in the 2-step chain above)

WORDS AND PHRASES
The letters of a word, when shifted, sometimes make a phrase:

3 step
BANJO - FOR ME

4 step
KJIAK - PIN UP

Occasionally, a word shifts to make an apposite phrase:

1 step
VALIUM - WE MOAN

2 step
LEMUR - NO PET

3 step
LOO - PEE

MISCELLANEOUS
The 1 step FAIL - GEOM. says it all.
The 3 step POT - SEX should be the other way round.
The 2 step FOLLOW - HANNAY should be 39 steps. Richard Hannay is pursued in the novel by ‘The Black Stone’.