

ZEBRA? WHAT ZEBRA?!

by Diana Nelson

Back in the mid 1960's, *Reader's Digest* printed this brain-teaser (which originally had appeared in *LIFE* magazine):

1. There are five houses, each of a different color and inhabited by men of different nationalities, with different pets, drinks, and cigarettes.
2. The Englishman lives in the red house.
3. The Spaniard owns the dog.
4. Coffee is drunk in the green house.
5. The Ukrainian drinks tea.
6. The green house is immediately to the right (*your* right) of the ivory house.
7. The Old Gold smoker owns snails.
8. Kools are smoked in the yellow house.
9. Milk is drunk in the middle house.
10. The Norwegian lives in the first house on the left.
11. The man who smokes Chesterfields lives in the house next to the man with the fox.
12. Kools are smoked in the house next to the house where the horse is kept.
13. The Lucky Strike smoker drinks orange juice.
14. The Japanese smokes Parliaments.
15. The Norwegian lives next to the blue house.

Now, who drinks water? And who owns the zebra? (Answers will be in the next issue of *Bytes and Bits*!)

These questions fascinated me... I finally solved them, and they whetted my ongoing appetite for the genre of games known as logic puzzles. As exercises in deductive reasoning, these brain-teasers can be quite intellectually stimulating.

The shareware program (and its registered counterpart) **Sherlock**, by Everett Kaiser, contains 65,536 of these puzzles. This program fast became one of my all-time favorite computer games — it nicely parallels one of my all-time favorite non-computer games!

When you begin a game, a series of clues are displayed, as shown in the example below.

In this example, you can see several types of clues:

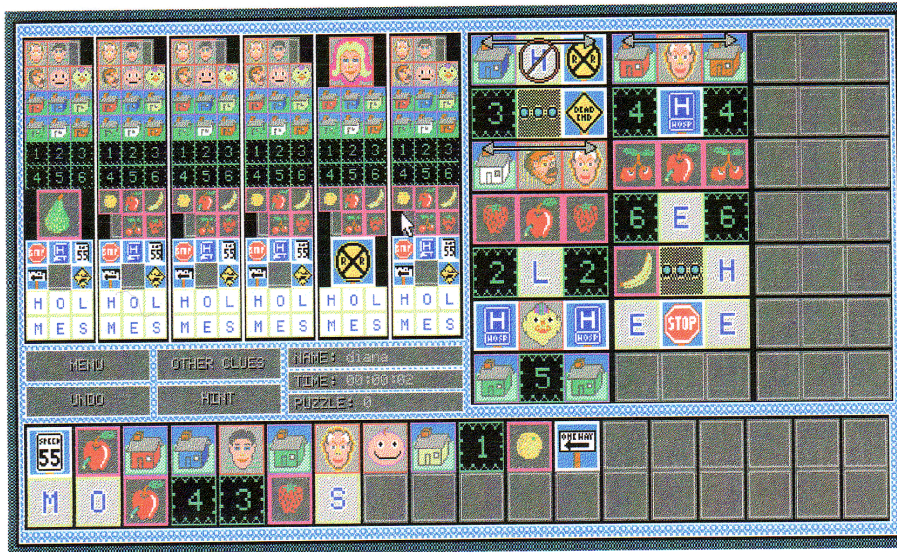
- **Give-aways.** In the example, we know from the start that the pear is in the left column, and the woman and the RR sign are in the second column from the right.
- **Vertical clues.** In the example, we know that the 55-mph sign is in the same column as the M (even though we don't yet know WHICH column that might be). Another type of vertical clue has a "NO" slash through it (not shown in the example) -- this clue means that the two objects are not in the same column.
- **Horizontal clues.** There are several types of horizontal clues. In the example, the first horizontal clue means that the blue house is two columns away from the RR sign (but we don't know which direction it might be) — and that the H is not between the blue house and the RR sign. We can now deduce that the blue house is in the third column from the left, and the H is not in the fourth column.

The second horizontal clue in the example means that the 3 is somewhere to the left of the Dead End sign. From this, we can initially deduce that the 3 is not in the far-right column, and the Dead End sign is not in the far-left column.

The fourth horizontal clue in the example means that the apple is in the column directly next to the strawberry. We do not know which is on the right and which is on the left, but we do know that they will be side-by-side.

By a process of elimination, we can figure out which people are in which houses, associated with which numbers, fruits, traffic signs, and letters. (If you register the software, the picture elements in each column can be varied; the shareware version is limited to these pictures.) When an element is eliminated, it can be deleted; when the solution is reached for a particular element, it can be enlarged to fill the space in the column. Eventually, there will be 30 large pictures on the screen — and, when you have successfully solved the puzzle, a congratulatory message will be displayed.

You can solve the puzzles as a form of solitaire, or you can configure them for tournament play. Note that some puzzles are much more difficult than others: some have numerous "give-away" clues, and others have none — but **all** are solvable. As the title screen quotes from Sherlock Holmes, "when you have eliminated the impossible, whatever remains, however improbable, must be the truth." If you like this type of brain-teaser, try this shareware program -- it's WONDERFUL!



Sherlock, by Everett Kaser, 35405 Spruce St., Albany, OR 97321. Shareware registration \$15. Another great game from the same author is Solitaire — it's similar to MahJongg, but it provides several additional starting layouts and tile sets. Unquestionably, my two favorite computer games are Sherlock and Solitaire.

Look for the answers to the Zebra puzzle and the Sherlock example in next month's issue!

ZEBRA LOST AND FOUND
by Diana Nelson

Have you figured out who owns the zebra yet? Well, in case you have given up, here's the answer:

The Norwegian drinks water.
The Japanese owns the zebra.

And here's the entire solution:

Houses	Yellow	Blue	Red	Ivory	Green
Inhabitants	Norwegian	Ukrainian	Englishman	Spaniard	Japanese
Pets	Fox	Horse	Snails	Dog	Zebra
Beverages	Water	Tea	Milk	Orange Juice	Coffee
Cigarettes	Kool	Chesterfield	Old Gold	Lucky Strike	Parliament

Now, what about the Sherlock puzzle? Here's the completed screen:

