HARD PROBLEMS AND HOW TO FIGURE THEM OUT

(EXPLAINED USING ONLY THE TEN HUNDRED WORDS PEOPLE USE MOST OFTEN)

WHAT IS A GOOD WAY OF FIGURING OUT A PROBLEM?

FIRST: IT MUST BE SO SIMPLE AND CLEAR THAT WE CAN EXPLAIN IT TO A COMPUTER. (OR A HUMAN. THAT'S NOT SO DIFFERENT.)

SECOND: IT MUST BE FAST ENOUGH SO THAT IT IS DONE BEFORE LUNCH. (OR BEFORE THE SUN BURNS OUT. THAT'S NOT SO DIFFERENT.)

SINCE PEOPLE STARTED USING COMPUTERS, LOTS OF PEOPLE GET PAID TO THINK ABOUT WAYS TO FIGURE OUT PROBLEMS. THAT'S WHAT I'M DOING. TODAY WE UNDERSTAND THAT SOME PROBLEMS ARE HARD, AND OTHERS ARE PRETTY EASY.

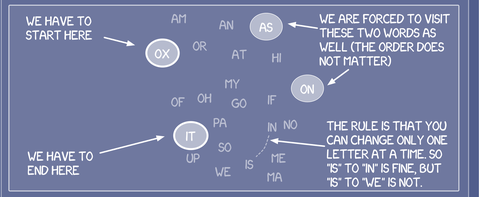
I WANT TO HELP US BECOMING BETTER AT TALKING ABOUT WHAT MAKES A PROBLEM HARD.

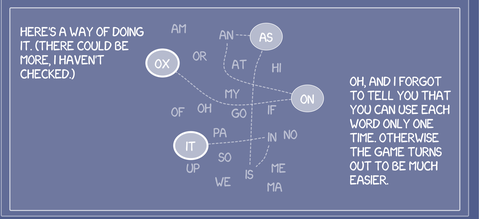
SO FAR, MOST OF THE PEOPLE WHO THINK ABOUT THIS STUFF LOOK ONLY AT THE SIZE OF THE PROBLEM.

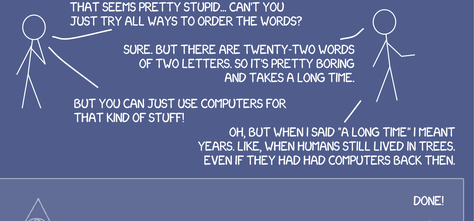
BUT SOME OF US FEEL THAT YOU CAN THINK MORE CLEARLY ABOUT PROBLEMS WHEN YOU NOT ONLY LOOK AT THEIR SIZE, BUT AT SOME OTHER THINGS AS WELL. SOMETIMES, THIS WAY OF THINKING EVEN HELPS US TO COME UP WITH BETTER WAYS TO FIGURE OUT PROBLEMS!

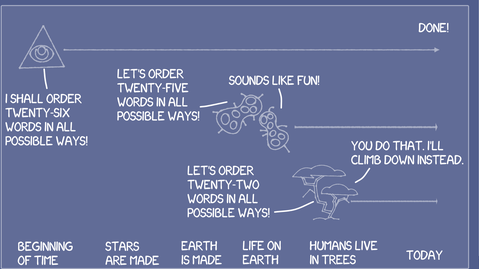
WORD-VISITING LETTER CHANGING GAME

THIS IS A WORD GAME PLAYED WITH THE TWENTY-TWO WORDS OF TWO LETTERS.

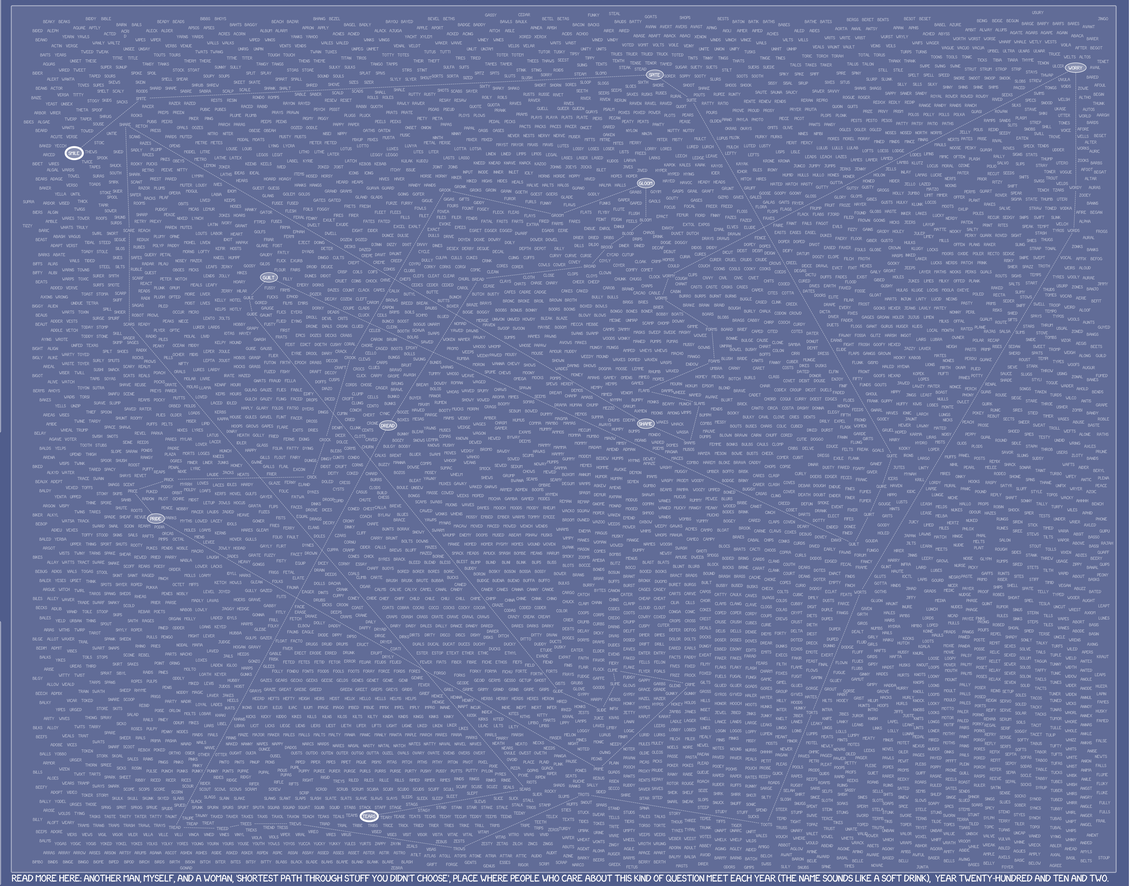








TWO OTHER PEOPLE AND MYSELF HAVE COME UP WITH A WAY TO FINISH THE GAME FOR ALL FIVE-LETTER WORDS – AS LONG AS YOU ARE FORCED TO VISIT ONLY AROUND TEN WORDS. OR MAYBE TWENTY. SO WE FOUND OUT THAT THE NUMBER OF WORDS ALL-IN-ALL WAS NOT SO IMPORTANT. INSTEAD, WHAT MAKES THE PROBLEM HARD IS HOW MANY YOU ARE FORCED TO VISIT. WE CAN EVEN FIND THE SHORTEST SUCH PATH!



READ MORE HERE: ANOTHER MAN, MYSELF, AND A WOMAN, SHORTEST PATH THROUGH STUFF YOU DIDN'T CHOOSE, PLACE WHERE PEOPLE WHO CARE ABOUT THIS KIND OF QUESTION MEET EACH YEAR (THE NAME SOUNDS LIKE A SOFT DRINK), YEAR TWENTY-HUNDRED AND TEN AND TWO.