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Twists on the tower of Hanoi.

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From the text: At a party that I attended, the hosts gave their guests the Tower of Hanoi puzzle with alternating dark and light discs and a challenge to move the 7 discs to a new post. (I disqualified myself because I knew how to solve the challenge.) However, the hosts' son and daughter-in-law misunderstood the directions and moved the dark discs to one side post and the light discs to the other side post. I immediately wondered, "How many moves did they take, assuming that they made the most efficient moves? How can their interpretation of the problem be generalized to n discs?"

Classification: I30 K20 A20

Keywords: puzzles; generalization; sum of powers of 2; binary notation; alternating colours

<http://www.nctm.org/Publications/mathematics-teacher/2014/Vol107/Issue9/Delving-Deeper.-Twists-on-the-Tower-of-Hanoi/>