You are Looped

Take a two-metre length of string and tie its ends together to form a closed loop. Put on your jacket, button it up, and put your arm through the loop and into the side pocket. Now say your fingers got stuck in the pocket (you keep glue there) and you cannot pull the hand out, and neither can you sneak the loop into the pocket and over your fingers.

(a) Can one in principle remove the loop without taking the hand out of the pocket?

(b) How, if you answered "yes" to (a)?

Answer of problem   **You are Looped**

(a) Yes - it turns out that the loop and your body are not linked thanks to the holes in your jacket, a.k.a. the sleeves. Imagine your body shrinking (Alice in Wonderland) with the hand still stuck in the pocket - you will find yourself pulled through the sleeve and through the loop until you are inch-high and sitting on the bottom of the pocket. But now obviously the loop and the jacket are not linked, and the loop can be removed!

(b) Make a loop and implement this. Required mushrooms can be found in your local forest. (You may also consult Ian Stewart's "Cabinet of Math Curiosities".)