Dear Person,

I want to share with you one way of making a **Shadow Puppet Machine** (for a window).

1. Think of something you love. Think about another thing you love and another and another. Think about something you care about. Think about another thing you care about and another and another. Think about something important to you. Think about another thing that is important to you and another and another.

2. Draw the things you thought about onto stiff sheets of paper. Bristol board has always worked for me, but you can always recycle some old cardboard or old folders or something.

3. Cut those images out. Use scissors or a craft knife (xacto blade).

4. Place the cut-outs of the things you love on a table or on the floor. Reflect on them.

5. Now try and imagine all the different kinds of things that people all across the world love and care about.

6. Think of a system, a machine, a weapon that is destructive.

Some things you might need: Bristol board, motor with slow RPM (you can buy cheap disco ball motors on the internet), with various weight capacities, hot glue gun, 2x3s, 1/8" birch plywood, screws, medium gage/light gage steel wire, 2 washers, 2 nuts, 1 eye hook, 3/8" hook, frosted shower curtain, staple gun, masking tape, craft knife, bike wheel, single point light source.

7. Draw the destructive things you thought about on stiff paper.

8. Cut the images out.

9. Reflect on the images.
10. Find a window that you would like to use as the screen for your shadow puppet machine. Windows near heavy foot traffic are nice. Cut a frosted shower curtain to the size of the window frame. Tape it or staple it over the window. Glassine paper or something equivalent could also work well.

11. Make or find a circular disc. The disk should not be much bigger than the width of your window, a bike wheel or trash can top could work. Or you can make your own disk (illustrated below). Cut a circle out of 1/8" birch plywood. If your disk is large, you may need to cut out 1/2 circles out of 2 pieces of plywood and hold them together with some 2"x3") brackets and screws.

12. Install your motor on the ceiling in front of your window. The center of the motor should be perpendicular to the center of the window and at a distance that is at least an inch longer than the radius of your disk. Attach an "S" hook to your motor.

13. Preparing your disc to hang on the "S" hook of your motor. If you are utilizing an old bike wheel, attach 4 wires to the spokes near the wheel's hub. Make twisted loops at the end of the wires. Hang the wires on the "S" hook of the motor. If you are making a wooden disc, or a trash can top get an eye bolt that is an inch longer than the thickness of your disc. Drill a hole the same size as your eye bolt in the center of your disc. Put a washer on your eye bolt and put it through the hole at the top of your disc. On the bottom side of the disk, slip another washer on your eyebolt and turn screw two nuts onto the eye bolt, making sure to tighten the second nut up against the first one to hold everything into place. Hang the eye hook onto the "S" hook of the motor on the ceiling.

15. Hanging puppets on the Shadow Puppet machine: What you need: light gauge steel wire, hot glue gun, masking tape. Depending on how big your cut-outs are you may need more than one wire per cutout to give them more stability. Take a length of wire and twist a loop at one end. Tape the loop on top of your shadow puppet machine disc at the edge and bend the wire down. Put a drop of glue on to your cutout and push it onto the hanging wire. Let the glue harden. Add another wire to the cutout to stabilize it. Repeat this process with the rest of your puppets.

16. Turn on the motor. Turn on the lamp. Go outside and watch your puppets move.

If you have any questions please don't hesitate to email me: dereulbach@gmail.com

Sincerely,
David Gregory Wallace

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#mkthings