OVERVIEW

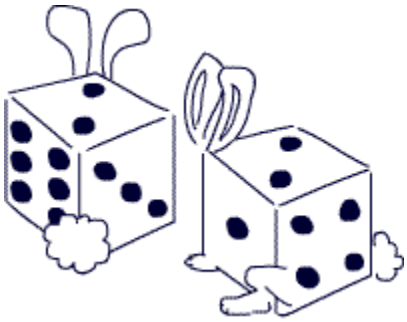
Pox is a game in which players infect each other's dice through the application of voodoo magic.

DESIGN PROCESS

After the dice project was assigned, I let it sit for a while and focused on other work. Then, two days after the assignment, I drove to Phantom of the Attic with Howard and Zikun to begin my brainstorming. I looked at and handled the different kinds of dice but didn't buy anything. This was partly because I'm cheap, but also because I didn't want to commit to a particular kind of dice before I'd had a chance to explore and really consider all the options.

As I began my design process I had a few vague goals in mind. Dice have existed for ages, and there are a lot of dice games out there based on tried-and-true mechanics that have been refined over a long period of time. Trying to come up with some entirely new dice-based game mechanic would be unrealistic, but if nothing else I wanted to come up with a way of looking at dice that would be new to me. I also wanted to focus in some way on the die as a physical object—since we were barred from using computer-based dice this seemed in keeping with the spirit of the assignment and well in line with my own interests.

BRAINSTORMING



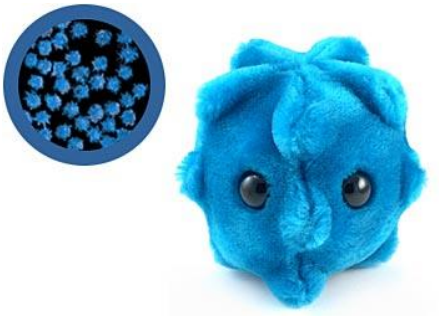
My brainstorming was based on free associations that came up while I was messing around with dice (first at Phantom of the Attic, and then later, back at my project group room, when Howard lent me some of the many dice he had bought). Most of my ideas bore little resemblance to games—they were more like toys or stories involving dice.

1. **Dice that reproduce like rabbits**... something like: rolling doubles would add another die to the pool, and perhaps some other event could cause dice to "die" and be removed from the pool. This idea tied in well with the whole "rolling many dice at once" fetish many gamers have, but also seemed like a toy that would take a fair amount of effort to turn into a game

2. **Growing/shrinking dice**–When I saw the tiny mini 6-siders and the oversized foam 6-siders, I considered some sort of mechanic in which dice could grow or shrink (i.e. be swapped out with larger or smaller dice) based on their rolls, which in turn would have some effect on play. Alternatively, one could swap among dice with different numbers of sides rather than dice of different sizes, though this might make for some screwy probabilities over the course of a game

3. **Amoeba dice** was a blend between the first two ideas. Dice would be able to grow and shrink, and dice size would somehow factor into game mechanics. In addition—either triggered by a certain event or else based on player choice/strategy—a medium- or large-sized die could divide, splitting into two smaller dice

4. **Dice infection**—I was attracted to the blank dice near the cash register... there was something subversive about the fact that you could roll them again and again forever and always come up with the same result: nothing. Near the blank dice was a box of Giantmicrobes virus plush toys, and it struck me that maybe the spots on dice are actually a form of disease—that healthy dice are pure white and the dice in common usage are unfortunates that have come down with black spots. Perhaps there could be a game in cleansing dice of their spots—I really liked the idea, and it would also play off the pleasure of purification



5. **Dice of different weights**—Howard was really into a pair of metal 6-siders (chrome?) that had this lovely heft to them, and I thought about the possibility of doing something with dice of different weights instead of or in addition to dice of different sizes... maybe scoring based on matches/discrepancies between dice of same/different weights

6. Giving players the **ability to redistribute dice dots** would be an interesting way of making the mechanism of probability directly accessible. Plus it would give people meaningful choices and maybe even a way to influence each other if I let them switch up one another's dice

7. I was a little concerned that many of my ideas weren't very game-like. So I considered a setup with a **circle of people who must divide their attention** between rolling the dice on their left and interacting with the dice of their neighbor on the right. It would incorporate elements of the card game War—players must beat their neighbor to be the first to put their hand on dice that roll a certain number, goal is to retain the largest pile of dice

8. **Stroop dice** was an idea based on the Stroop task, in which a person looks at a list of color words and must state aloud the color of the ink each word is printed in. Most people find it difficult to resist the impulse to read the color word. I was curious whether it would be possible to create a similar tension/conflict between saying the number *of* dice versus the number *on* the dice, but this proved not to be a challenge at all and thus wholly uninteresting. I should have known better, because I have a psychology background and understand what makes the Stroop task difficult. There was no reason one might expect to get a similar result with what I was trying. But oh well—it could have been cool if it had worked.

9. **Katamari dice**… another way to approach the dice growing/shrinking idea, also "rolling" the dice

10. **Dice bingo**... something to do with the positions of the dots and bingo

SELECTION/ELABORATION

Even though I continued brainstorming after idea #4, I knew that the dice infection idea was the one I was really interested in pursuing. I liked it a lot from both a story and game mechanics perspective. This kind of deconstructionist approach, in which the dots on a die could be affected/manipulated independent of the die itself, seemed to hold a lot of promise. The difficulty lay in figuring out how to make it work—regardless of whether the dice started out blank or with some configuration of dots, I was having trouble envisioning what the next step would be. What would be the actual mechanism by which players added or removed dots? I wanted the

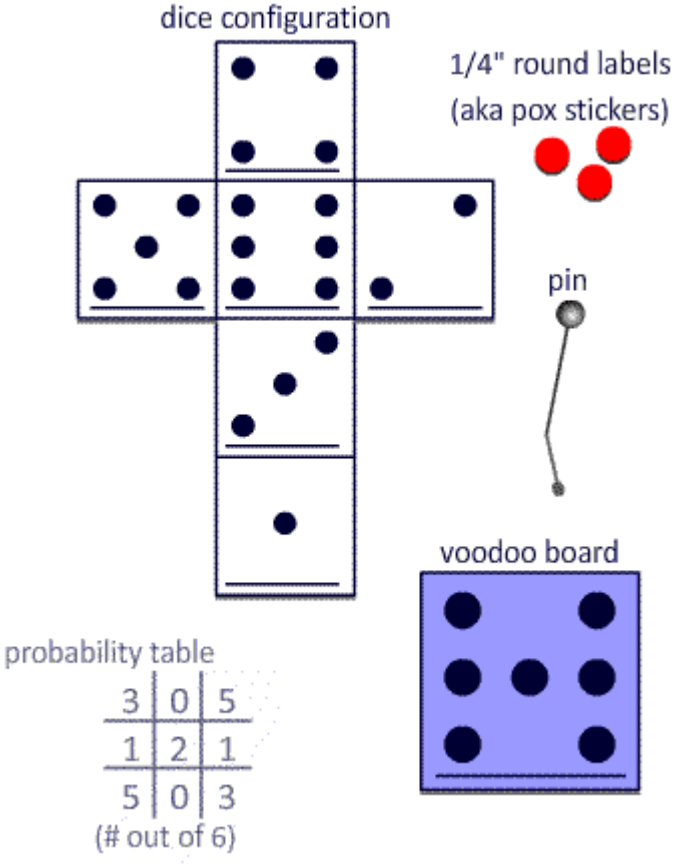
game to involve meaningful dice rolls, but there didn't seem to be a good way in which rolls of the dice could affect the number of dots on the dice—they were just too closely linked.

Sometime on Friday, Feb 1st I realized a simple way of side-stepping my problem—if I made it so that non-infected dice still had spots, I wouldn't need to worry about starting from or ending with totally blank dice. As the dice became infected, instead of gaining spots, their spots could change color. I was a little sad to let go of the idea of healthy, spotless dice, but it seemed worth it—the moment I realized I could just change the infected spots' color I felt I'd found a way to move forward with the dice infection idea. Having a set number of dots on the dice gave me a concrete foundation to work from; going with the traditional dot configuration, I knew that each die had 21 possible sites of infection. Now I could begin considering what would cause the infection, how it would spread, and whether there would be ways of quarantining or healing infected dice.

While trying to think of ways in which dice could become infected, I hit upon the idea of sticking things with pins, voodoo-doll-style, as a way of causing/controlling infection. From there it wasn't much of a jump to envision a "voodoo board" displaying all possible dot positions on a die face. One could stick a pin into any of the dots on the voodoo board in order to infect dots in that position across multiple dice. With this position-based mechanic, consistent orientation of the dice would be important—I would need to draw a line indicating the bottom side of every dice face, similar to the underlining on the numerals 6 and 9 on 10-sided dice. Once started, I wanted the infection of the dice to worsen cumulatively over time on its own—although players would be trying to hasten the deterioration of their opponents' dice, the infection would also propagate on its own independent of player intervention .

INITIAL SET OF RULES

GAME MATERIALS:



- Four white and four purple oversized foam dice, with dots configured as in the cross-shaped figure at left. Because the position of each dot matters, every face has a line indicating the bottom side, as with the numbers 6 and 9 on 10-sided dice.
- About a hundred ¼" round color coding labels—preferably all one color, otherwise just ignore color.
- Two "voodoo" boards (one white, one purple)—special foam boards that have a dot in every position that could come up on a die face. For early testing I made prototype boards from a cut-up Styrofoam cup.
- Two long straight pins, one topped with a white ball, the other with a purple.

GAME RULES:

- The game is for two players—one plays white, the other, purple. The white player plays with the four white dice, the white pin, and the purple voodoo board; the purple player plays with the four purple dice, the purple pin, and the white voodoo board.
- The goal of the game is to infect your opponent's dice in such a way that the infection spreads to your opponent. If your opponent is the first to get ten pox dots on his or her face, you win.
- Play begins with White's turn. On your turn:
    1. Stick your pin into one of the dots on your voodoo board; your opponent must roll his or her dice in response.
    2. Line up your opponent's dice and check the topmost faces for:
        - **Player contagion**: If more than one die has an infected dot in the same position, the infection spreads from the dice to the player. Your opponent must put a pox dot on his or her face for each infected dot position that occurs on more than one die. If the player gets up to ten pox, he or she loses the game.
        - **Spread of infection**: each infected dot infects other non-infected dots in the same position. Put a pox sticker onto each dot that occurs in the same position as an already-infected dot.
    3. Your voodoo takes effect. Put a pox sticker onto any non-infected dot that occurs in the position where you stuck your pin.
    4. Your turn ends; it is now your opponent's turn.