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Use the Fours

Tension. It's the key to every competitive game. It hangs over the final table of Poker tournaments. It prevents you from sitting down when there's five seconds left and your team is down by one. Without it, sports wouldn't be entertainment, players would quit games halfway through, and our lives would be much, much poorer. Our goal for this project was to design a game that maintains tension throughout the whole game, so that players are constantly engaged. For tension to run high on every turn, there has to be uncertainty about who is going to win the game, up until the very last turn. On top of that, every action has to be critical to the outcome of the game in a very tangible way - simply compiling resources is not a strategy that requires a player to be on his or her toes. There are excellent examples of games that already exist that are extremely intense on each turn: Jenga for example forces the player to focus all the time because any one move could lose the game for them. Likewise, Russian Roulette is constantly intense because the game could be over at any moment (for a less violent image, picture people playing Hot Potato). However, these games usually end because of pure chance or because some player does something wrong - we set a secondary goal for this game, to make it winnable through positive player action.

We approached this game from the player's point of view, focusing first not on a specific Mechanic, but on what Aesthetic we wanted to game to have. We learned much from Marc LeBlanc, and used his MDA design approach (Hunicke) as well as his philosophy of "failing quickly." However, it became clear even before we started testing out mechanics that there would be some significant constraints upon them. First of all, each player needs to have potential to clearly affect the outcome of the game on each and every turn. This meant that we could not have

a winning condition with any sort of point system, unless very few points were needed to win. To maintain the tension, we also needed to make sure that EVERY player was involved ALL the time, instead of taking their turn and then dozing off for a bit. Of course, if a game can be won on any turn, usually players are going to try as hard as they can to make the most out of each turn, so if there is a lot of information available, and the mechanics and strategies are complex, players could take a long time while deciding what to do. This would lead to the other players becoming bored, so we tried to keep the Mechanics of the game simple, the strategies obvious, and the information limited.

Thus, we began with a simple Mechanic - trading in cards to try and build a winning hand. In order to make it based upon a skill, and not luck, we allowed players to draw cards that had already been discarded, so they could use their memory to their advantage. The first iteration of the game consisted of a deck of cards being laid out face down in a grid, except that each player held 5 cards. Players traded cards in one at a time to get new ones, attempting to build a straight flush. This game was not very fun, it was quite difficult, and there was almost not tension because it was so unlikely that anyone could actually accomplish the goal (even with an excellent memory, odds are it would take a couple dozen turns).

We decided to eliminate a portion of the deck and turn half the cards face-up so that it would be easier for players to build up their hands. We tried this two ways, and neither one worked that well. In one version, you had to replace a face-up card with another face-up card. In this game, players had virtually identical sets of knowledge, and it was easy to tell what the other player was going for. This version was dominated by information that was known to all players, and so it turned into more of a pure strategy game. Games with Perfect Information (Salen and Zimmerman, ch 17), like chess, tend to lose their tension when it becomes obvious that one player

is going win, and this actually happened during some of our tests (of course it was not a game of perfect information, but the vast majority of cards that were chosen were face-up). The other way we played was to replace face-up cards with face-down ones and vice versa. The dominant strategy was obvious - picking a face-up card meant you knew what you were getting, AND your opponents had no idea what you were throwing away. This led to more and more of the cards being face-down, so that it became HARDER to win the game as play progressed. This killed the tension because it was frustrating to be moving backwards, away from your goal.

We realized that 1) that players needed to be constantly gaining information so that a winning hand would become increasingly likely and 2) that not every turn is a potential victory if players may only turn in one card at a time. We tried allowing players to trade as many of their cards in as they would like, and the game still proved challenging, so we ran with that. We also kept all the cards face down, but required players to reveal what cards were being placed in the grid. The benefit of this Mechanic is that all players have to pay attention to what the other players are doing during their turns, or else they forfeit their only source of information. Also, all players have EXACTLY the same amount of information about what cards are currently in the grid (assuming they don't forget), so the longer a game goes without a winner, the more nervous everyone will become that other players remember more than they do. This is a key Mechanic from the games Memory and Stratego - ideally the player gains more information as the game progresses, but the result of turning over a card that has just been discarded gradually turns from a Certain outcome into a Risk, and then into an Uncertain outcome again (Salen and Zimmerman, Ch 15). In practice, this game is quite draining - it requires much more concentration to play well than any other game we've encountered. However, we were trying to make a game that kept players involved, and this system certainly did that, so we kept it.

The final iteration involved the creation of intermediate goals. The variance in time it took to get a straight flush was too long - it could take a few turns or it could take ages to reveal the necessary cards. We introduced other goals that each player had to accomplish before moving on: getting a straight, getting a flush, and getting four of a kind. These subgoals represented "Closures" but not "End Conditions" (Bjork and Holopainen, 419) - they were meaningful transitions that changed what the players were trying to accomplish, but not eliminate anyone or feel that they had lost. Revealing ones successful collection of a straight or four of a kind signals to the other players that your goals have changed. Technically, four of a kinds are less likely to be randomly drawn than straight flushes using our abbreviated deck, but we wanted to make sure that players could not carry over more than a couple of cards from one goal to the next one. This forces players to not look too far ahead when planning, and to keep the game moving. It also causes players to concentrate on information that is only relevant for part of the game. For example, you would concentrate on keeping track of certain numbers when trying to obtain a straight, but after you do, all you care about is suit to get a flush. Unfortunately, you probably haven't been looking at the suits closely.

The ordering of the goals made it successively harder to progress, so that other players usually caught up to the leader. One property that we did not foresee was the importance of 4s, as they essential for any straight in a 3-person game. Several times, players going for four of a kind were able to temporarily block players going for straight flushes by hoarding the 4s. This is a good example of negative feedback (Hunicke), which was essential for keeping matches close and maintaining our competitive tension.

Play-testing revealed a surprising amount of desire within players to continue certain mechanics of game-play even after a winner had already been determined. Our game mechanics

permit a player to take a card from the grid (Hunicke 3-4). When this occurs, a player gains a piece of information: the identity of a card (Salen Zimmerman 205-208). During play-testing, following the determination of an overall game winner, players would flip over grid cards in an intense and determined attempt to uncover a pesky card that had eluded detection for quite some time. For this degree of emotion and willingness to continue game mechanics to exist, unresolved tension must be present. According to Salen and Zimmerman, meaningful play could still exist past the point of an overall winner being determined because of the remaining tension. The potential for meaningful play is derived from unresolved dramatic tension and uncertainty in form of the location of a particular card (388).

The location of a card serves two purposes: as a source of conflict between two opposing players vying for a certain card, and as a source of conflict between a single player and a system which sneakily hides the object of desire. Two games emerge from this situation: one against opposing players, one against the system (Salen, Zimmerman 250). Discovering who the overall winner is of the overall game only partially removes uncertainty in the minds of players. Although one player may be removed from the contest and declared the winner, conflicts between players and the system may remain. As play-testing has revealed, players still had a desire to acquire the information necessary to beat the system. As a consolation to the main game, players may continue game play in an attempt to beat the system. Subsequently, the order in which players resolve their conflict with the system determines second, third, and possibly fourth place end positions with regards to the overall game. Having beaten the system, meaning can still exist for the player who finishes in last place.

However, continuing game-play beyond the point where a player is declared the overall winner is not always a viably fun option. With only eight cards in a suit and only four suits in the

game, a situation may arise where two players are attempting to obtain a straight-flush within the same suit. Were either of these players to be declared the overall winner, there would be a significantly large possibility that the winning player will possess cards necessary for the none-winning player to achieve a straight-flush within a suit. In other words, the other player cannot possibly win in the conflict against an opponent or the system by pursuing a straight-flush in the same suit as the winner. Furthermore, dramatic tension for the non-winner is all but diminished when the winner reveals his cards, confirming the location of an elusive card. With no dramatic tension and a lack of uncertainty, meaningful play cannot occur (Salen Zimmerman 388). Continuing play enacts harsh positive feedback on the non-winning player, risking disenchantment and apathy by forcing this player to give up all his cards and pursue a straight-flush of an entirely different suit. Essentially, this player must start an entirely new game against the system (215). It is therefore our recommendation that rather than risking player disenchantment, the continuance of play to determine second, third, and fourth places should be an entirely optional extension of our original game.

Our card game was always meant to maintain and build tension as the game progressed. Players were to be fairly rewarded for their strategic moves only to the extent of a perceivable temporary advantage. Other players must always feel that they can easily catch up fairly as a direct result of their own achievements, not fear punishment from other players, and not be disastrously penalized for committing a mistakes. The end result of our play-testing was a memory based card game with objectives arranged in such a way that a clear yet tricky path to victory existed which built tension and rewarded skill but prevented players from falling irrecoverably behind. In order to maximize the use of the dramatic tension created from the game while staying true to the idea of a game that does not punish, continuing the game to discover

who places second, third, and fourth should be optional. Our group is very satisfied that we could produce a non-wussified competitive and engaging casual card game.

Materials:

- Standard 52 card deck
- 3 player game uses all cards Ace through 7 [A,2,3,4,5,6,7]
- 4 player game uses all cards Ace through 8 [A,2,3,4,5,6,7,8]

Setup:

- All players are dealt an initial hand of 4 cards. Players may look at their own cards.
- Remaining cards are set up in a 4x4 grid formation, face down.

Gameplay:

- Player to the left of the dealer goes first.
- A player is allowed to trade up to 4 of their cards with cards in the grid.
- Any Cards being traded in must be shown to the group prior a player picking new cards
- Traded cards remain face up until they are reincorporated into the grid at the end of a player's turn.
- Cards being taken from the grid do not need to be shown to the group.
- The trade process may only occur once per turn per player.

Objective:

- Players must obtain the following hands in the following order to win: Straight, Flush, 4-of-a-kind, Straight-Flush.
- Players must show their hands to the group immediately after achieving any of the aforementioned special hands.
- Obtaining a Straight-Flush when the current objective is to obtain a Straight does not constitute advancement to the 4-of-a-kind objective.
- Players may continue to play for 2nd, 3rd, and 4th places only if the group agrees to do so.

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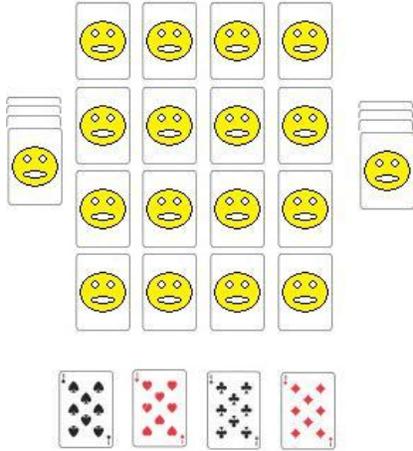
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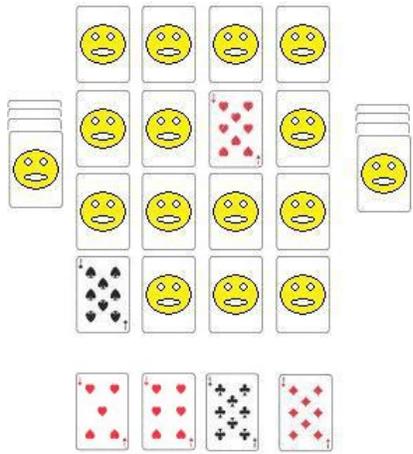
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Appendix

Four of a kind



Two cards are traded in from the four of a kind hand, revealing information about cards on the grid to all players



Information displayed to a player after a trade

