

Commissioned Game 2 — Ironclad

Frank Lantz

A game for 2 players

Ironclad is a game of arena combat between opposing teams of massive, armored robots. It is also a game about two logicians attempting to resolve a philosophical disagreement. The two "sub-games" occupy different dimensions of the same space. The gameboard is a grid: the robot combat occurs in the squares of the grid, whereas the philosophical debate occurs on the intersections of the grid. The two sub-games occur in separate and unrelated domains, but each exerts a subtle and crucial influence on the other.

Rules

The Board

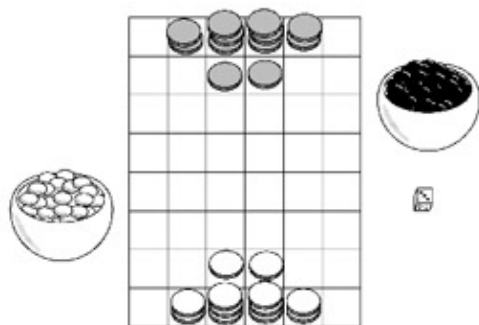
The gameboard is a 6 x 8 (48-square) checkerboard, positioned between the players with the two narrow ends facing either player. You can create an Ironclad gameboard simply by marking off two outside rows of a checkerboard with masking tape.

The Pieces

- 24 checkers (or any other stackable piece): 2 colors, 12 of each color
- 64 stones (or any other small marker): 2 colors, 32 of each color
- a 6-sided die

Setup

Each player chooses a color of checker and a color of stone. Organize the checkers into six stacks as follows: two stacks of three checkers, two stacks of two checkers, and two stacks of one checker. Place the stacks according to the diagram below. Collect the stones in two bowls and set them beside the board.



Structure of Play

- Players alternate turns.

- During a player's turn, he or she chooses one of the two sub-games and makes a move in this sub-game.
- The player's opponent then makes any legal move for the player in the other sub-game.
- As soon as a player achieves a winning condition in either sub-game, that player immediately wins the overall game.

Playing Ironclad: The Spectacle of Mechanical Destruction

Beneath its hermetically sealed dome, the Grid is a clockwork battlefield littered with the steel corpses of recombinant automata. They re-assemble nightly to battle for the horror and amusement of an audience that has long since crumbled into dust.

Explosions shake the foundation of the Grid. With thundering tread, massive automated Warsuits stride through columns of smoke and the incandescent latticework of laser fire. Flocks of nervous cameras drift and scatter around their shoulders. Colorful insignia decorate scorched breastplates. Periodically these giant predator machines freeze, helms bowed, listening for the silent word of sponsorship.

Objective

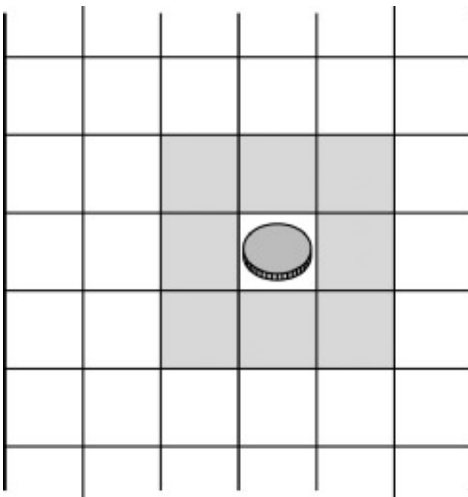
To move one of your robots onto any of the six squares on the opposite side of the grid (your opponent's first row).

How to Play

You control a combat squad of giant robots, each robot represented by a stack of chips. During your turn you move one of your robots or fire on one enemy robot.

Moving

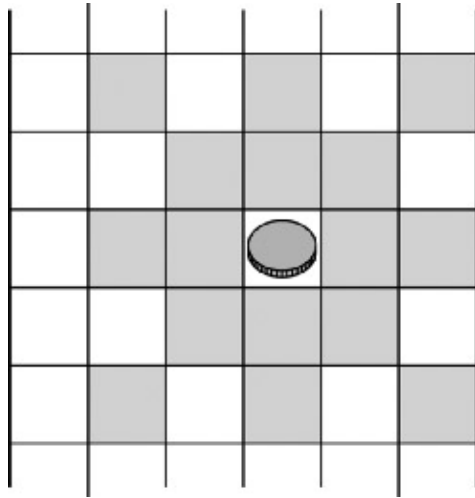
Robots can move one square in any direction horizontally, vertically, or diagonally. They may not move into a square already occupied by another robot.



Robot movement

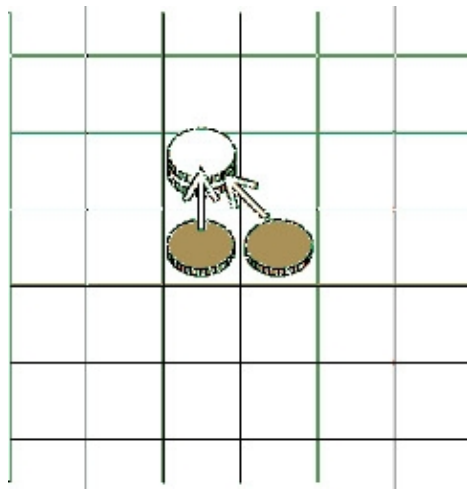
Firing

A robot can fire on any enemy robot that is within two squares in a straight line horizontally, vertically, or diagonally. If there is at least one enemy robot within range of one of your robots, you may choose to fire during your turn instead of moving. To fire, choose a target. Only enemy robots within range of one of your robots can be selected as a target. The target takes one point of damage from each of your robots that are within range. Robots may fire "through" friendly or enemy robots with no effect.



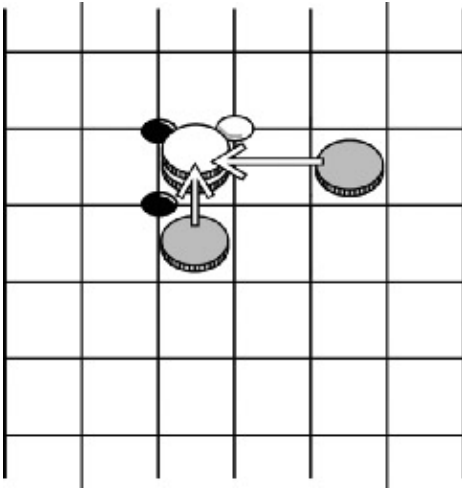
Robot range
Damage

For each point of damage a robot takes, remove one checker from the stack representing that robot. If, during one turn, a robot takes more damage than the number of checkers in its stack, remove all of the checkers from that stack.



Robot combat The two black robots attack a white target, destroying it.
Terrain

The grid contains terrain represented by stones located on some of the grid intersections. A robot located on a square whose corner points contain one or more stones receives a defensive bonus from this terrain. Each stone gives one terrain bonus. If this robot is the target of enemy fire, the firing player must roll the die one time for each robot that is firing on the target. The number showing on the die must be greater than the target's terrain bonus, in order for that robot to damage the target.



Defensive terrain Again, the white target is under attack. This time, the target has a terrain bonus of 3. The black player must roll twice, once for each attacking robot. The target only takes damage on a roll of 4, 5, or 6.

Playing Ironclad: The Technique of Scholarly Discourse

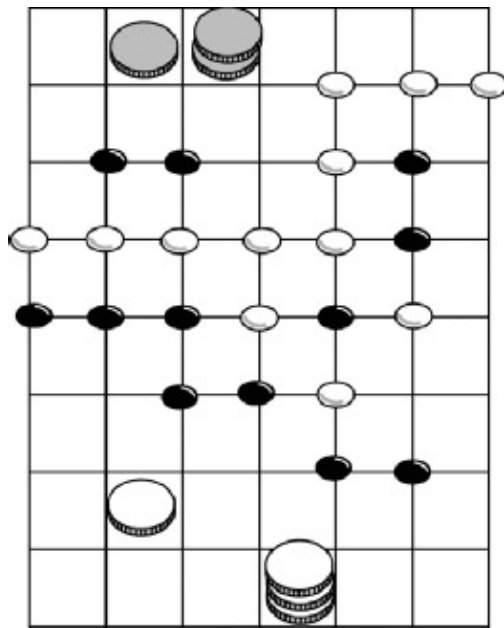
The Grid is a formal system for philosophical disputation. It has been handed down through countless generations by the ones who live and die in pursuit of enlightenment. Its borders, once engraved with axiomatic symbols, are now worn smooth by the motion of a thousand cuffs. The Laws of Inference determine the position and motion of the stones. Shifting constellations trace the arguments of Scholars as they fight to establish the irrefutable truth of propositions whose meanings have long since been forgotten.

Object

To form an unbroken string of stones, running from any one side of the grid to the opposite side.

How to Play

You are attempting to manipulate stones (representing logical statements) on a grid (representing a formal philosophical system). Each turn you must place a stone of your color onto the grid. If you cannot place a stone you must move one stone of either color.



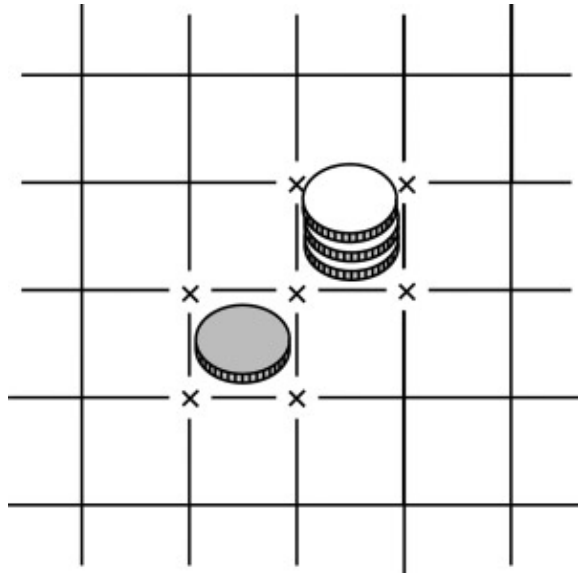
Winning position White has an unbroken string running from one side of the board to the opposite side.

Placing

Stones can be placed onto any unoccupied intersection of the grid, including those around the edges of the grid. The only limitation on stone placement is the *Rule of Negation*.

The Rule of Negation

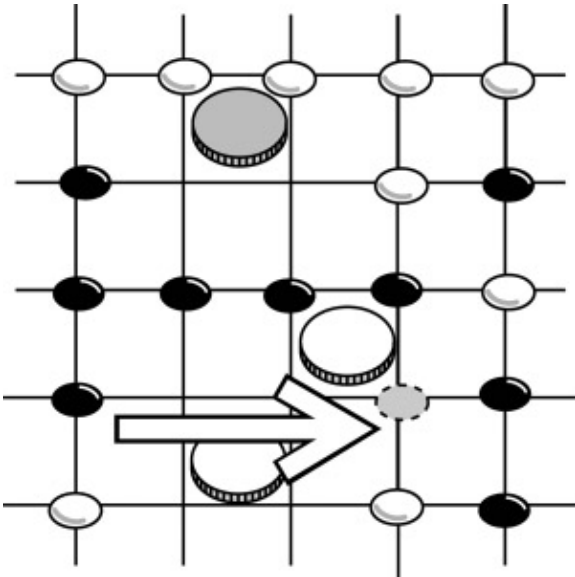
You may not place a stone on the corner point of any square that contains one or more checkers.



Rule of Negation No stones can be placed on intersections shown marked with an X.

Movement

If during your turn you cannot place a stone, you must move one stone of either color from one intersection of the grid to another. In order to move, a stone must be situated next to an open intersection. You may move a stone in the direction of any open intersection as far as you want, until it is blocked by another stone. The Rule of Negation has no effect on stone movement.



Moving a Stone The Rule of Circularity

You may not move a stone if that stone was the last stone moved.

Forfeit

If during your turn you cannot place or move a stone, your opponent wins.

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Design Notes

Frank Lantz

Ironclad

It seemed like a good idea at the time. The original concept for Ironclad was a game that had a single rule-structure but two completely different "themes." Both players would manipulate identical, abstract pieces and cards according to identical rules, but the pieces and rules would represent something different for each player.

Here was my original idea:

The game is a card game for two people. The game has two separate sets of rules, one for each player, and in a sense the two players are playing different games. Although structurally similar, the motif and narrative surface of the two games are entirely different. One player is playing a game about an argument between two philosophers; the other is playing a game about giant robots battling in arena combat.

The cards use abstract symbols and numbers. A card that represents a "Premise" in the philosophy game might represent a "Base" in the battling robots game, "Irony" vs. "Camouflage Armor," and so on. All game actions would share the same mechanic but have

different names.

The players compete to determine which game is being played.

The game mechanic involves building a network of cards across the table towards a player's opponent. The game mechanic will probably include hidden information (such as cards hidden underneath other cards) because I want there to be a bluffing element. Also it may include shared resources, such as asking each player to design a deck, with both players drawing from either deck.

I will attempt to make the game as simple as possible. I'm thinking of using fewer than 10 different card types with some variations, such as strength or direction.

I have for many years been haunted by the image of massive, futuristic philosopher-robots engaging in combat that represents an abstract clash of ideas and beliefs. (The Nietzsche mech: enormous and overpowering, but piloted by a shriveled homunculus who is crawling over the monster's surface wrenching off parts of the machinery and using them to jam his own gears. The Derridean mech: a swarm of robots who scatter to the edges of the arena and begin to disassemble its walls and floor, etc.) It's one of those *idée fixe* that I knew would come out somewhere but never knew when it would appear.

I love the high-culture/low-culture friction of the game, and I also think that the concept gets at something about games and representation that is hard to put into words but is an important and unique aspect of games.

I considered a number of different names for this game, including 2-Player, or 2-P, but eventually decided on the name Ironclad.

I wanted the design to adhere to specific constraints relating to the context of the game. Because players would only be given a ruleset (and possibly some printed elements), I wanted to keep the game materials minimal. My intention was to make a game that was ambitious and unusual, but I wanted people to actually play it, not just read it, and so I made the materials as simple as possible.

Ironclad began life as a two-player card game, with a high concept and a game play mechanic that was vague to the point of non-existence. And here was the problem—I wasn't really interested in the mechanic, I was completely focused on the "big idea." I could picture the way the rules would be laid out: two sets of rules, one for each player. Each player would have the same instructions about the goal of the game and the types of actions allowed in terms of manipulating pieces, but their mental image of what those actions *represented* would be completely different.

Because of this interest, I set out to find a straightforward structure that would be flexible enough to bend both ways. The first hurdle was the problem of *space*. Robots occupy space and move through it, philosophical debates don't. Any structure that had pieces moving around would evoke the robot game to the detriment of the philosophers' game, so I needed something more abstract. A card-based structure seemed to be the perfect solution. I was thinking of how the card game *Milles Bournes* creates the image of a car race without any spatial maneuvering.

My initial plan was for a set of 30 cards: 15 base or premise cards, and 15 attack or argument cards. Each card would have a numerical value; players would lay the cards out on the table in various arrangements in an attempt to destroy their opponent's bases (or invalidate their arguments) in the most efficient way. The cards would have abstract symbols in the center and a different caption and "flavor text" facing each opponent. One direction would say "EMP Blast" the other would say "Occam's Razor." Imagine Richard Garfield's *NetRunner*, only not as much fun.

At this point I had a game that was almost working but wasn't at all enjoyable. More importantly, the game was supposed to be about one structure and two representations, but the structure really didn't fit *either* representation. After a few weeks of ruminating on this problem I wasn't able to come up with a different structure that would work. More importantly, the whole project felt wrong to me. Normally it's a lot of fun to think about how the structure of a game system relates to its theme, but trying to come up with a structure that would serve as the fulcrum for two opposing themes was not fun. There was something unpleasant about it, something particularly forced, overly deliberate, and awkward.

I began to think a lot about how structure and representation work in games. There was a notion buried in my original idea, the idea of a fundamental separation between a game's structure and whatever subject matter or activity or setting the game represents. The implication was that you could take any number of different structures and match them up with various themes for different effects, but there wasn't any *deep, essential* relationship between any particular theme and any particular game mechanic. Upon subsequent examination of this notion, I recognized that there was a kind of hidden agenda driving it, a pro-structure/anti-theme agenda. The agenda goes like this: the really interesting thing about a game is the structure, the system, the math, the topological convolutions of phase-space, whereas theme is just so much make-believe, fantasy, and pretend. Look player, you don't really want to swing a giant sword and kill monsters, you want to manage limited resources and calculate recursive probabilities! This notion wants to pry structure and theme apart so that structure can evolve on its own, released from subservience to the surface concerns of theme, or at least freed up to enter into new and more dynamic arrangements with these concerns. Picture the changing relationship of form to subject matter in twentieth century painting, only with orcs instead of nude women.

After a couple months of banging my head against it, this notion seemed less certain, or at least less interesting. I mean, sure you could do what I set out to do, but it was starting to seem like an empty and somewhat grotesque trick, like running electricity through a dead frog's legs and calling it ballet.

There are, of course, many relationships between theme and structure in a game. Whether or not any of those relationships are *essential*, they are complex and vital enough to resist my attempt to lightly shuffle them around. For example, there is the symbiotic relationship by which theme and structure assist each other. Theme can provide the entry point into a complex structure whose rewards are deeply buried: first it's all about the sword—the calculations are only there to conjure up the sword. Eventually the game becomes about the calculations and the sword fades away. Then there is the fact that representation can be used as a shortcut to embody a complicated structure that might otherwise be too much for the player to assimilate. If the red squares are "lava," then the player won't forget they are out of bounds. Why do the pieces in Tetris move from the top of the screen to the bottom? They're bricks! Theme can add arbitrary limitations to the structure, and arbitrary limitations are often a good thing.

Sometimes games actually *are* the things they represent. A painting of a bowl of fruit, no matter how realistically it's painted, is never going to turn into actual fruit. But the line between a game's simulation of, for example, bravery, betrayal, or greed, and those actual things is not so clear. Kory Heath's game Zendo seems at first to be a somewhat whimsical representation of the spiritual discipline of Zen Buddhism; but in play it can become a form of actual meditation.

In any event, I was operating under the influence of this half-recognized agenda, this kind of half-hearted critique of the conventional one-to-one correspondence of structure to theme. And ironically, despite the pro-structure implications of this agenda, I had two themes I really liked and no structure I cared about. I was grasping around trying to find any old structure I could plug in that would dutifully carry my two precious themes!

So, I abandoned Ironclad and I retreated, with some relief, to a totally different idea that I had been idly thinking about for a while. Often, when I looked at a grid, I would imagine a board game that was two different games at once. One set of pieces would move, like Chess, from square to square, while

another set of pieces would move along the lines from intersection to intersection. I thought that there should be little or no contact between the two sets of pieces, and I pictured them simultaneously occupying two dimensions of the same space, affecting each other in some subtle and oblique fashion. I imagined the square pieces feeling the presence of the line pieces like the chill you feel when a ghost is in the room.

Now I had a structure I was excited about and a theme that emerged from the structure, rather than one that felt "applied." The two sets of pieces were "bodies" occupying the material realm of the squares of the grid, and "spirits" occupying the non-space of the intersections between the squares. Early versions of this idea involved bodies attacking and killing each other, resulting in the release of spirits that would flutter around subtly influencing subsequent combat. The goal was to get a body across the board to your opponent's side. Each turn a player would decide which type of piece to move. I tried a few variations of this and it played pretty well, leading to a game of strategic sacrifices.

I then began to toy with refinements to this theme: pawns and stones, bodies and souls, the material and the metaphysical, objects and ideas. Wait, objects and ideas? Without intending to, I had bounced back, hard, to Ironclad. It was obvious to me that the two sets of pieces were robots and concepts. From this insight the final form of the game began to take rough shape. I needed to pull the two "realms" apart a bit more. I gave the stones their own goal—to link two opposite sides of the board together as in Hex. This seemed to fit well with the idea of a "chain" of reasoning and was nicely reminiscent of the metaphysical contests of Herman Hesse's fictional Glass Bead Game. If the pawns were going to become giant, lumbering battle-mechs they needed to act the part more—they needed to shoot, and they needed to take damage, not just disappear. A stack of pieces seemed like an easy way to show energy or health, so the pawns became stacks of checkers. For the robots the stones operated as terrain, giving a defensive bonus that made them harder to hit. For the philosophers the robots operated as interruptions, gaps in the grid on which no stone could be played. Now instead of having one game with two different "surfaces" (but not really), I had two games occupying the same space (but not really). Ironclad had become a game about superimposition, an experiment in game play collage.

Early playtesting indicated that whichever sub-game "heated up" first would dominate, leaving the other one abandoned in a more stable position, in which any individual move was less likely to disturb the equilibrium and was therefore less valuable. I needed to make sure both sub-games moved forward at roughly the same rate. Rather than force each player to move in each sub-game every turn, I decided that on her turn a player would pick a sub-game in which to move and her opponent would move for her in the other sub-game. This made the choice of which sub-game to move in more interesting: because your opponent was trying to make the worst possible move for you in the other sub-game you were sure to eventually respond. This structure led to a nice back-and-forth between the two sub-games as the players' attention oscillated between them. I also like the way that moving for your opponent blurs the lines between the two players in a game that is already about double-vision on many levels.

Final playtesting enabled me to work out the remaining details. The "choose a target" method of firing was developed to allow for combined fire without adding extra steps to a turn in the robot sub-game (multiple robots can fire with a single move.) In the last stages of the design I fixed the size of the grid and the number of starting pieces, and ironed out any ambiguities in the rules.

In its stereoscopic use of the grid, Ironclad resembles a collision between Chess and Go. But there is a deeper connection. Two ideas from Chess and Go were a major influence on the game. The first is Bughouse, the Chess variant in which two games are played simultaneously and captured pieces in one game show up as new pieces in the other. The second is the Go concept of *tenuki*. Because of its deep complexities, Go can almost be thought of as a collection of multiple, simultaneous games. *Tenuki* is a term that describes a player leaving a "local" situation to move somewhere else on the board.

A final note: although the philosophers have long ago forgotten what they are arguing about, I happen to know that it's the mind/body problem. The robots are fighting because that's what robots do.

Frank Lantz

Frank Lantz is a freelance game designer based in New York City. For the past 3 years Frank has been lead designer on a variety of projects for two independent game developers—gameLab and Pop. Prior to that, he was Creative Director of New York design firm R/GA Interactive, where he worked on several games including the PC titles Gearheads and The Robot Club. Frank is a member of the faculty of NYU's Interactive Telecommunications Program, where he teaches classes in game design and interactive narrative.
