PROFESSOR: All right, let's talk a little bit about today's reading. [INAUDIBLE], this giant book that you see in front of you and that you have the link to-- how many of you, by the way, read the actual book and how many of you just went online? How many got like a library copy? [INAUDIBLE] It is basically divided into three sections, there's rules, play and culture. Basically it's a collection of just what other people have said, but tried to organize in a way that makes for a pretty good textbook.

The first chunk is all about analyzing games, of systems, of rules, the bits that actually go into the construction of games. The play section, which is what today's reading was from, is really about what people do with these games. And then culture comes after that, which is the world around the games, the world that might have been created by the games as people actually interact with them. I don't think we have that many readings, this might be the last reading from this book.

Yeah, let's see, culture. We've got-- oh, there is? OK. There is one more reading, but I don't know if it comes from this book.

AUDIENCE: [INAUDIBLE]

PROFESSOR: Yeah. Bernie De Koven is the last reading, and that's going to be Wednesday, I think? And that's going to be-- that's one of actually the writers that's cited quite a lot in today's reading. And it's a much smaller book. It's this thick and it's easy reading.

But it's a good jumping-off point for this class because this is literally where the book ends on thinking of games as designed objects. And things that could stand alone as a product, there's a set of rules that can be passed on from generation, this solid thing, into what people make out of all of this. And if you're interested in that, then there's another class-- I think it's CMS 616 Games and Culture. And it should be offered-- I can't remember if it's a fall class or a spring class. Spring class? OK so it's offered this semester.

If you're not a senior and you're going to be around for another year you might want to consider that if you're interested. To sort of see where it is going. And obviously there are a lot of researchers here at MIT that are starting to get into the realm of sociology. There are folks here who study history of games, folks who study what people currently do with games. For
instance, how many of you have met or taken a class from T.L. Taylor?

A few people? Yeah, OK. So she comes from such a sociological background. A lot of her work is ethnographic, which just means it's like a researcher going into a native culture and seeing how people behave there. And what they value, and what are the common practices. And she does it with massively multi-player online games. Now she did e-sports, that was the most recent book, now she's looking at live-streamers. And she has a lot of research, a lot of information. So that's a good person to learn from.

Some of you also have come from Todd Harper's class. He's a postdoc here in our lab. He's taught quite a number of classes, both CMS 300 and CMS 100, as well as his own game design for expression class, where he looks a lot at competitive styles of play-- I'm sorry, competitive communities of play. So fighting games community was his dissertation. Looking at League of Legends right now, I think, pretty much what he is looking at now. As well as some other aspect like queer games and the people who play and make them. So that's another good angle to look at.

So fact to today's reading. There's a couple of really, really useful ideas in it that can be used for a variety of ways to look and analyze your game. Especially when you're trying to observe people playing your game and trying to figure out what's going on here. And the games that we've got today, including some of the games that John has are all the sorts of games where what's interesting about the game isn't so much what's written in the box, what's written in the rules, but what happens between people. And I would argue for many, many games, even the ones that are traditionally recognized for the magic of what's inside the box, what's actually interesting is what happens around the game.

Last week we talked about Go, for instance. And it's like, OK, what's actually written about the rules of Go is not that elaborate, right? Really, really simple, and mathematically is really elegant. Entrancing in the sort of way that mathematicians like an elegant formula. But what's also interesting is centuries and centuries of strategies and culture that have built up around this particular way of playing.

So there's a couple of useful tips that help us think about what happens in a game socially. That's internal-- internal interaction and external interaction. So let's talk about internal interaction. What do you think Zimmerman's talking about when he says an internal social interaction in a game?
AUDIENCE: So I think he's talking about how you feel about your role. So different people have different jobs in the game. So I'm supposed to be doing something different than you're supposed to be doing, even though we both might have the same goal, might not even have the same goal, but the same ideas to win or whatever.

PROFESSOR: And the reason why you have those differences is set up by basically how the game's rules are set up, right?

AUDIENCE: And so the internal social [INAUDIBLE] might be my idea about that. My idea of what my role in the game is.

PROFESSOR: OK so I think I'm mafia, right, in the game of Mafia. I'm the mafia, or one of the members of the mafia, so I think I'm going to play this way. The game rules tell me about when I can communicate and when I can't. Basically everyone can communicate at the same time then everyone shows [INAUDIBLE] And then you come up with the strategy of how you're going to play it. It evolves from the roles that was given to you by the rules of the game. How about external interactions when it comes to social play? What's the flip side of that?

AUDIENCE: Friendship outside of the game [INAUDIBLE]. Mafia's [INAUDIBLE] Say your friends not one of the Mafia. You'd be like, oh, he's my friend. I'll save him for last.

PROFESSOR: Yeah, I'll torment that guy for last because he's my friend. I'm not going to eliminate him right away.

AUDIENCE: Another interesting one was, I think, also the past experience with Mafia. I know that a person's really, really good at Mafia, so I'm going to kill them on first round just because I don't want to deal with it.

PROFESSOR: Right, I just want to get them out of this game. Sure, yeah.

AUDIENCE: I think that happens with a lot of games. Just like you team up on [INAUDIBLE].

PROFESSOR: Couples playing a game and that's supposed to be all where everyone's supposed to be playing an individual game. Yeah, knowing that someone is a pathological liar. So that actually also comes in design, by the way. I used to write games for the MIT Assassins' Guild. And there were four people who were playing games at the same time when I was writing games, and we always used these four people as ways that games are often broken mostly through weird social interactions.
Someone who’s going to be the rules lawyer, for instance. And someone who’s going to stop the game in order to make sure that his interpretation of the rules is what everybody else is going to play with. Not necessarily to make sure that the rules are adhered to, just make sure that his interpretation is going to work. Somebody who’s going to stop a game because they’re always going to keep asking for reminders on how the rules work. Just like, uh, I can’t handle this right now, all this is supposed to be happening simultaneously, too much math, stop.

And I’m going to continue that, so this is the second kind of person that I had to design for. The third kind of person, the person who is so capable of just summoning the collective brainpower of everybody to be able to churn through any kind of puzzle that I can create, because this person was such a convincing speaker that basically he can use your head like a node on a parallel computer. You would just say, can you do this thing for me, it won’t take a minute, and somehow he will do it. This person had that social skill.

I’m trying to remember what the fourth one was. Oh yeah, there was one person who could do the same thing entirely on his own. If you put a puzzle in the game, the puzzle will be solved by this one person sooner or later, if it wasn’t already solved by someone else. So here’s this giant macroeconomic system that I’ve set up, or something like that. And that one person will figure out the optimal way to solve everybody’s problem simultaneously.

I could design for that. So I could design to make sure that each of these people don’t break the game, but still can do the thing that they want. Some of the folks that I’m describing actually enjoyed that, some of them didn’t enjoy that. That’s just how the brain works, but if the game falls to that then they I’m not having any more fun than anyone else. So I knew something about who was going to be playing my games by knowing that these four people. I could cover a very wide range of different ways that my games could just fall flat on their faces.

These are real people, but anybody who plays my games could exhibit that same sort of behavior at an opportune time, I have to make sure that my rules could hold up to that. So when you design your games, how many of you have somebody in mind? Someone particular about who’s going to end up playing the game. Friend, family member, person in class.

AUDIENCE: For me, I think when I worked on the game [INAUDIBLE] Hurricane, I think that it definitely reminded me of specific friends that I played Twister with in the past, a game that I felt was a
game to get inspiration from. But sometimes I don't have [INAUDIBLE].

**AUDIENCE:** The easiest one for me is just developing for myself. And people who enjoy the same types of games that I do. If I find a game fun, then people who enjoy the same types of games that I do will likely find it fun. If I don't enjoy the game, I shouldn't be making it.

**PROFESSOR:** Yeah, you are a sample point, you are a valid sample point. It just happens to be one that you know very well-- yourself. There is a mantra out there that often mentioned by people in the indie game development community, which is you make a game that you want to play. And I'm not entirely sure that I agree with that. But I can see where it is coming from.

Because if you can't satisfy yourself, then the likelihood that you're going to satisfy any other audience member out there who would actually play your game is lower. But I think there is something about having to design for people who are not you which is also valid but obviously it's harder.

**AUDIENCE:** I've heard it described as a Venn diagram. One is games I want to play. The other one is games other people want to play. A third is games I can make. Ideally, you want to be right in the center.

**PROFESSOR:** Yeah. Vast set of ideas that you have in your head, only a small group of which are things that you actually want to do. And then a smaller group of that are things that other people want to do. A smaller group of that is something you can [INAUDIBLE]. That makes sense. The feasibility thing is what we've been addressing this entire class. How do you actually make a game that you can make, as opposed to make a game you wish you could make.

So if we've got lots of different kinds of people who you're making your games for, people who you played similar games with in the past, for instance. People who you know are the kind of people who tend to-- who won't break your game. When you're making the Twister game, you have to make sure that you can play the game without breaking it, because you are physically larger than a lot of folks and able to reach much further. And make sure there are rules, that you can design your rules for that sort of thing.

But then there's also broad categories of people. And that's why we get into it the reference to Richard Bartle in today's meeting. I did not include the whole article, but the whole article is online in plain HTML. If you just do a search for Bartle-- I forget the name of the article, but if you just do a search for diamonds, hearts, clubs, spades, Bartle, you'll find it. I think it's
"Players Who Suit MUDs" or something like that.

A lot of that work was created when he was basically the originator of the very first multi-user dungeon. Anyone heard of a multi-user dungeon? How many have played one of those. I've played way too many. You see people playing, when you're reading the text that is typed on the screen.

AUDIENCE: [INAUDIBLE]

PROFESSOR: OK, so how many of you have seen or played a text adventure? So text adventure, basically everything is text. You've got verbal descriptions instead of graphics of the rooms that you are in, and the objects you can pick up, and what you can do. You got an inventory that's explained to you text. You've got text commands you can enter. Usually when you're entering commands it's a verb and a noun. Get key, open mailbox, get [INAUDIBLE], that sort of thing. Some are just single words. Inventory, north.

Actually the full north command is actually go north, but there are shortcuts where you can just type N. North, south, east, west. A multi-user dungeon, traditionally, was a multi-player text adventure. Everyone would just occupy the same space on a server, they would use something like Telnet, or maybe a dial-up, on [INAUDIBLE]. And call into a server that will be serving them ASCII text. And then simultaneously going to two other people. It's very, very important that in multi-user dungeons, multiple people are connected simultaneously.

It's not like an asynchronous thing where one person connects at a time, even though they're all logging in to the same world. So not all that different from what you expect from MMO RPG nowadays, the massively multi-player online role-playing games. Only obviously no graphics, and much slower pace of game, because everything has to be typed. You don't just [walk] [off] you have this inventory. All my examples are really fast examples.

Give envelope to Bob. It's like you could actually give that kind of thing and then you just transfer an object to somebody else named Bob in your space. And he described four different categories of people that he often saw play his games that I think still holds up pretty darn well. So who remembers any of the four categories?

AUDIENCE: The kind of people who really get deep into underlying [INAUDIBLE], who want to learn about how things work.

PROFESSOR: The diggers, right? The miners. The people who-- Minecraft is a great example for a game
that is designed just for those people. People want explore how the system works, how the environment works, who want to discover things and to see what’s behind that next mountain.

**AUDIENCE:** I'll go with [INAUDIBLE].

**PROFESSOR:** Killers or plugs, and what was the justification for what they do? What do they do?

**AUDIENCE:** [INAUDIBLE]

**PROFESSOR:** The people who are there for the other people, primarily. In a way, killers and the socializers are there because other people are there. There are different reasons. The diamonds want to win. That is by any definition of winning. Now MUDs traditionally did not have a definition of winning. You couldn't win that game. There wasn't any final bosses you could kill, so you had to find your own metrics for winning.

So it could be there are PDP type diamonds. You want to rack up the highest tournament score or something, but you're not there explicitly to cause people grief. You're not trying to hit them when they're not looking. Sort of like we're going to organize a duel kind of thing. We're going to see who can play this game the best, as opposed to making people upset.

There's a way to remember this that I think has really been useful. I find the playing card suits not so easy to remember, but I could actually remember the categories pretty easily by whether you are acting on something or you're acting with something. And the question is whether you are acting or interacting.

I just put two different [INAUDIBLE] that meant [INAUDIBLE] It's also supposed to be this. Interacting with [INAUDIBLE]. And then at the world, all the systems, and then other players.

So if you're interacting with other players, we've got the socializers. And people who are acting on other players are the killers. Acting on the world. [INAUDIBLE]

**AUDIENCE:** [INAUDIBLE]

**PROFESSOR:** [? Assignments, ?] which leads this to be the

[INTERPOSING VOICES]

**AUDIENCE:** [INAUDIBLE]
These are the glitch finders. These are the people who figure out how to get outside the boundaries, your invisible walls. Who want to see whether there’s a way they can get below the very lowest layer on Minecraft. And what happens when you cram so much explosives in one area that you can’t perform this experiment without killing yourself. They’re the ones who are going to do it. Because they want to see what happens.

Whereas these folks are really a little bit more about how do I use this world to be able to obtain some sort of other goal. Which is usually points, some sort of achievement, some sort of recognition from the other players. They don’t usually get the recognition, but they have a numerical number to show that they’re deserving of it. And I find this to be a really useful way to think about what games can do to be [INAUDIBLE] to different people.

Because the truth is that even though when you play a single game, you may be primarily one of these people, you may not play every game this way. Say I’m a [INAUDIBLE] someone who’s trying to chase all the points. Someone who is trying to get the top of the leaderboard in [INAUDIBLE] or something. But that may not be the way that I’m going to play World of Warcraft. That may not be the way that I play contract bridge. I might be playing more socializer when it comes to contract bridge.

And different people are often different things in different games. And sometimes different things in the same game. Right now, I am trying-- everyone in this room probably knows by now, I play too much StarCraft, right? Usually, I am trying to win. I am trying to raise my rank. They have a ladder system. Sometimes, I just want to zone out and talk to people. I just want to type-- I just want to go into free-text chat and be friendly for awhile. I’ll do something very dumb that takes no actions whatsoever. And I’m just like, at least my fingers are going to be able to type my [INAUDIBLE]. And that’s what [INAUDIBLE].

Different times of the day, different moods that I’m in, I’ll do something different. And if you can make a game that would be able to cater to people in different moods, then that’s great. You’ve got a game that can be played in different situations, or more importantly, among a group of people who are all feeling kind of different-- [INAUDIBLE] type.

This is not the only breakdown that I’ve seen. There is a system that’s been pitched by, I believe, a developer at Ubisoft Montreal-- although don’t take my word for that-- Jason Vandenberghe. And he suggests, actually, a system on the OCEAN model of psychology. Has anyone heard of this? It’s five big drivers of motivation that psychologists have, basically,
created as a framework.

And one of them is neuroticism. There are people who are motivated because they are neurotic. And I can totally identify with that. It's like they want to be-- it gives them comfort to be performing neurotic things-- things like hundred-percenting a level, or a game, or something like that. It's a motivator. It's a driver. It's no particular achievement to hundred-percent a level in *Metroid*, because a lot of people do it. But the fact that that number is there motivates a certain group of people to be able to bring that number from 99% to 100%.

So I want to make clear that this is just a theory. This is just-- Richard Bartle-- creator of the very first MUD in Oxford, I believe-- United Kingdom-- and he just wrote an article on a website-- he would have put it up on a blog and blogged it at the time-- about, these are the people that I happen to see play my games. And if I-- I can generalize these people in these four categories.

Let's see. Other stuff that's covered in today's reading includes the idea of people bringing things from outside of the game into the game. And we talked a little bit about metagames. And this article goes into a little bit more detail about that. So there's-- that's, again, four things that the book goes into when it comes to metagaming that-- and these were posited by Richard Garfield, designer of Magic: The Gathering.

But he was-- the way how he was describing it is that these are all kinds of metagaming experiences. And I'm trying to make a game that capitalizes on people playing the game when they're not even really playing the game. When they're not sitting in front with their decks of magic, they're still playing the game, because they can do something else.

And so, anyone remember what those four things are?

**AUDIENCE:** Things that you bring to the game--

**PROFESSOR:** Yep.

**AUDIENCE:** Things that you take from the game--

**PROFESSOR:** Right.

**AUDIENCE:** Things that you do between--

**PROFESSOR:** Mm-hmm-- between games-- yep.
AUDIENCE: --people-- between games. And the last one is--

AUDIENCE: Last one is, actually, probably the more traditional understanding of metagaming. So if-- even if you haven’t read, you might have an-- or, you might be able to hazard a guess. You got through--

AUDIENCE: [LAUGHS]

PROFESSOR: --spot on.

AUDIENCE: [INAUDIBLE].

PROFESSOR: That’s right-- things that are-- things that you do during the game that are not, actually, part of the game rules. So what do-- what are some examples of things that players bring to the game-- from outside of the game they bring into the game?

AUDIENCE: So there’s physical objects, but also knowledge.

PROFESSOR: Right.

AUDIENCE: So to the baseball game, it would be like your bat.

PROFESSOR: Right-- your ball-- things that you might require to-- not have even start the game in the first place.

AUDIENCE: [INAUDIBLE] it might be cards, I guess.

PROFESSOR: Mm-hmm.

AUDIENCE: But you can also bring knowledge. So if chess is a game that you’re not familiar with that you study up-- they call it booking up-- on opening, different tactics, things like that that you can study, bring into the game-- basically, like preparation.

PROFESSOR: Yeah, yeah-- so if you are going to call into a competitive game, you might come in with a strategy that you intend to execute. That happens in sports a lot. We train these particular maneuvers-- these particular plays.

AUDIENCE: Even, like, metagaming [INAUDIBLE] that. I guess that might be [INAUDIBLE]. Magnus Carlsen-- the world’s best chess player-- he played openings that are not that good, just to screw with people.
PROFESSOR: When you’re playing the players?

AUDIENCE: Preparation, yeah.

PROFESSOR: Yeah, and if you’re playing the player-- I think that still fits within the category of fix your brain to the game, because that means that you are bringing to the game an understanding, or a guess, about what your opponent is like, and how your opponent may have played before. Someone’s reputation is, actually, [INAUDIBLE] in today’s reading as something that you bring to your game. It’s not something that you voluntarily bring to the game. It’s just something that precedes you.

So then, what stuff do you take from the game?

AUDIENCE: I mean, so I guess the typical items might be enjoyment from the game, or whatever. And Avery talked about [INAUDIBLE] Magic, where you win a card if you win the game.

PROFESSOR: Yeah, yeah, there can be prizes. There can be cash prizes. There can be stakes.

AUDIENCE: If you’re gambling--

[INTERPOSING VOICES]

AUDIENCE: --incentive [INAUDIBLE].

PROFESSOR: Yep, again, reputation.

AUDIENCE: You can also take knowledge from the game.

PROFESSOR: Sure, especially a game that you lost, right?

AUDIENCE: Yeah, exactly.

PROFESSOR: Yeah.

AUDIENCE: I think that's what [INAUDIBLE].

PROFESSOR: Yeah, you-- hopefully, especially in a game that-- in the kind of game that I wish I could design one day, you take away something that deepens your understanding of the system that you just played. And that’s wonderfully intrinsic motivation of something that arises from the rules. But it’s not going to affect the game that you just played. It’s going to, maybe, affect your next
AUDIENCE: This is super cheesy, but you could take away new friendships.

PROFESSOR: Oh yeah, well, social games-- there are people who end up in this area during--

AUDIENCE: [INAUDIBLE] enemies.

[LAUGHTER]

PROFESSOR: Or new enemies, yeah. You can--

AUDIENCE: [INAUDIBLE] diplomacy games.

PROFESSOR: Yeah, well-- yeah, diplomacy is great at creating bad relationships. So yeah, OK. So the stuff that you take away from the game makes a lot of sense. The interesting thing about the ante situation is that that almost moves into a third category, which is the stuff that you do between games. Specifically, you're taking out of the game something--

AUDIENCE: [INAUDIBLE] you said that Richard Garfield made that game. Was he the first person to do that?

PROFESSOR: I'm not sure about that. But he made Magic: The Gathering. He's the designer of it.

AUDIENCE: OK. You said that he was [INAUDIBLE].

PROFESSOR: No, no, no, no, no, no.

AUDIENCE: [INAUDIBLE] as soon as the game was created.

PROFESSOR: Yeah, yeah, yeah. No, no.

AUDIENCE: [LAUGHS]

PROFESSOR: Well, I mean, he wrote it into the original rules. And nobody liked that part. Oh, I think very few people seemed to like that part of the rules. So--

AUDIENCE: Yeah, every [INAUDIBLE] been banned for as long as the game's been around.

PROFESSOR: Well, OK. But it is original rules. But that's a mechanic that-- it's a mechanic imposed on top of the game. I guess it was part of the game, originally. But now, if it's played for ante, it's being
played outside of the game, because it's not part of the rules anymore.

Where, if you put your game-- if both of you are putting a card up-- say, a really, really skilled player is going to play a really, really not skilled player. And the not skilled player says, well, chances are, I'm going to lose. But the skilled player is anteing up an incredibly valuable card that I might not, otherwise, be able to get. So I'm going to ante up this crap card that I will always be able to replace if I lose it. But it makes it worth playing that round, and then the game [INAUDIBLE].

AUDIENCE: It's an interesting [INAUDIBLE]. So playing [INAUDIBLE] a game that would have some luck in it, where it actually has a very high [? appearance ?] of luck involved in there. And so, it's really, really easy to play this game and talk about-- and say that you got really, really, really unlucky-- or to say that you got really unlucky. And I have definite [INAUDIBLE] after playing this game. It was [INAUDIBLE], but how unlucky they were during that game.

PROFESSOR: Well, OK. I mean, that's something-- yeah, sorry, sorry. Go on.

AUDIENCE: Oh yeah, that's just-- oftentimes [INAUDIBLE] people have a tendency to be lucky or unlucky in this game. And they're, like, well, I've lost-- and someone might say, I've lost-- [INAUDIBLE]. Oh, I've lost a lot of [INAUDIBLE] games in a row. But I'm just unlucky in all of them. Something like that there.

PROFESSOR: Well, something that happens between games-- it's like-- you brought up a couple of things. One is the discussion about how this game seems to be operating. And on Reddit, that tends to be a very angry conversation among friends who have played games of Twilight Struggle, or something. It's a combination of storytelling, which is, man, we're just being able to recollect how that game went, and how unlucky I was. [INAUDIBLE] all the time. Man, that dice just does not want to roll sixes.

And I think that's more something that you take away from the game. But if you're going to go back into the game and then understand, OK, I thought this was a game all about logic. Now it's really just luck-based. And then you're going to the next game of the same-- you're going to play the same game again. You're bringing different expectations. So you're adjusting your expectations. So I will put that in a category of something you take between games, in adjusting your expectations.

Then what happens during a game, other than the game itself-- stuff that's not in the rules?
Yeah?

AUDIENCE:  There's taunting, or--

PROFESSOR:  Trash talking?

AUDIENCE:  Yeah.

PROFESSOR:  Yeah, trying to mess with your opponents psyche while the game is going on.

AUDIENCE:  Also just more metagame stuff-- thinking strategies over in your head, and playing out different scenarios of what might happen.

PROFESSOR:  Right. Does this person even know about this strategy? I am seeing something that looks like the player might. But really-- are you really going to do that? It happens in card games all the time.

What else happens during the game other than the game itself? There are times when gameplay just stops. And I, actually, gave a couple of examples of that. What's the out-of-game considerations that forces the game to stop, or things you have to do to keep it going? Remember any of these things?

AUDIENCE:  Shuffling a deck of cards?

PROFESSOR:  Those are usually mentioned in the rules. You reach the end of the deck, and then you have to reshuffle your deck. I meant physical, safety considerations, for instance. Somebody fell down in the middle of a game of tag, or something. And then it's, like, nothing in the rules say that you have to stop the game. But people do, because you want to make sure the person's not hurt.

It happens during the game. And metagaming is sort of concerned. But it's not, necessarily-- and the reason why it's important to the game is because you want people to say, hey, I want to play tag again. I want to play tag. But I want to know that I'm safe while I play tag. So if people understand, on the metagaming level, that if somebody looks like they might be hurt, the game will not continue until we verify this person is not hurt or got this person adequate medical attention, for instance.

But that doesn't necessarily always have to be like a physical hurt. That can be-- there's a great account in the reading about playground groups fighting over what nice rules meant, and
the words that they were using to be able to describe what nice rules meant. And they had
become increasingly-- at first, they were just starting with, well, we're going to be playing nice.
They call that [INAUDIBLE] rules. And then, people who didn't want to play nice started joining
the group to play Four Square. This is not the mobile game, Foursquare. This is the bouncing
ball version of Four Square.

And then every time they did something outside of the rules, the people who were trying to
play nice then had to add in-- get more, and more, and more specific about what nice meant.
And that wasn't actually the intent. They didn't actually want to get all that specific. They just
wanted people to play nice. Because once you get more and more specific-- because there's
so many kinds of rules-- lawyering mode, then the context should be nice.

So that's something that's happening during the game. The game's actually still being played.
Part of the game of four square is just bouncing this ball around. But if all these rules--
negotiation-- that's happening to be able to try to steer the game into the direction of different-
- in this particular case-- different groups of kids prefer to play the game. One of them-- one
group wants to be very competitive and winner takes all. The other side was like, the whole
point of playing this game is so that we're not annoying other people-- the traditional-- this
divide, I guess.

So Magic: The Gathering was, ostensibly-- this could be something that he came up with after
he had designed the card game, in order to justify why he decided [INAUDIBLE] the card
game. Often when you ask a designer or a writer, why didn't you do this, it's very easy to come
up with a justification that sounds good. But really it isn't necessarily what they were thinking at
the time when they came up with the game.

So we have no way of knowing. Even Richard Garfield will not be able to tell you honestly
whether that was the case or not, because no one really remembers very clearly what they
were thinking when they were designing the game. But it's a good justification, I think, which is,
what does a player bring to a game of Magic? Well, they bring their deck of cards and the
knowledge about how that deck is supposed to work, because they built that deck themselves.
And it's supposed to be this little engine to be able to play our very specific strategy, which is
something that they want to try for the next game.

They may take the ante away-- but suddenly all of that knowledge about, OK, now I know that
my deck is actually a pile of crap, for instance. What happens between games? You assemble
new decks. You chat on forums. Maybe new cards get released. And then you have to try to figure out how your deck is going to work against them, and then what happens during the game itself.

I don’t know, actually, how much taunting happens on Magic tournaments. Anyone play Magic competitively? Is there taunting?

AUDIENCE: There’s never anyone actually taunting them, like, you suck. I’m going to destroy you.

PROFESSOR: All right--

[INTERPOSING VOICES]

PROFESSOR: OK, the Magic people are going, you sure you want to play that? You know, that sort of thing.

AUDIENCE: I got goaded into that once-- yeah, actually-- being competitive [INAUDIBLE].

PROFESSOR: [LAUGHS]

AUDIENCE: There’s also a huge backlash right now of people just being animals during games, and just--

PROFESSOR: Well, yeah.

AUDIENCE: The tournament organizers are, specifically, supposed to look out for that and try to not do that, because [INAUDIBLE] bring them back to play.

PROFESSOR: Right, because they’re trying to build up a social community.

AUDIENCE: I’ve already-- [INAUDIBLE] admit that you have something that’s-- that you have a [INAUDIBLE] you can finally use. Or if you’ve gotten to a position where you’re about to use an ability that will almost win you the game. And sometimes your opponent will realize that he’s unable to stop it and [INAUDIBLE]. And so, I read a comic which was about someone like, oh, my God. I’m going to get to use my play blockers all for the first time. [INAUDIBLE]. And he’s, like, I’ll pay you money if you just want to keep playing [INAUDIBLE].

[LAUGHTER]

PROFESSOR: Wow!

AUDIENCE: This didn’t actually happen.
But that would be hilarious. OK. All right.

[INAUDIBLE] to an entirely different level of gameplay. There's a famous story about one of the best players in the game-- forgot to bring the one card in the deck he could win. So he completely controlled the game and then couldn't do anything [INAUDIBLE].

OK.

He won the whole tournament.

He won the whole--

He got every, single person to concede before he had to play [INAUDIBLE].

Yeah, sure, sure.

[INAUDIBLE]. Why wouldn't he?

Yeah.

[LAUGHTER]

Well--

And it brings another level to the metagame, where everyone knew the deck. So everyone knew exactly what he was trying to do. And at the time, where he was just going through the motions, they were, like, OK, sure. I know what happens.

You know this person has this card. You just don't know that person had the card at the moment. Right?

[LAUGHTER]

OK.

Just building off of that, [INAUDIBLE] very limited StarCraft higher-up games that I've [INAUDIBLE]. There would be often times where neither base were destroyed. But one person would, automatically, concede defeat.

That's the majority of StarCraft games, actually.
AUDIENCE: I never understood it. But they're not still going. [INAUDIBLE]. Their economy was completely destroyed.

PROFESSOR: Yeah.

AUDIENCE: Well, in that game, you can lose [INAUDIBLE], but not, actually lose [INAUDIBLE].

AUDIENCE: You can stall the game for a very long time by just running around building pylons across the map.

[LAUGHTER]

PROFESSOR: It's a game full of positive feedback loops. So it's one of those things where, once you feel that things are snowballing, if you are right that things are actually snowballing out of your control, then yes. There's no way to actually win. But yes, you can draw it out. But theoretically, there really shouldn't be a way to win, because it's a game of positive loops-- of positive feedback loops.

AUDIENCE: Some people quit prematurely.

PROFESSOR: Yes.

AUDIENCE: Adrian was famous for rage quitting and commentators [INAUDIBLE].

PROFESSOR: Did he just rage quit?

AUDIENCE: It was pretty even.

PROFESSOR: Yeah.

AUDIENCE: He could still come back.

PROFESSOR: And that's the thing. If you are wrong, and you are not, actually, in a bad situation-- if you are actually pretty even-- then, because it's a game of limited information-- imperfect information-- you don't know exactly how bad off you are.

AUDIENCE: On the [INAUDIBLE] the person not having their [INAUDIBLE]. So that's-- sometimes you-- [INAUDIBLE] you make them play it out. I want to make sure that-- [INAUDIBLE] if the person didn't know how to win. They had it. But they just didn't know how to use it properly to win. And so [INAUDIBLE], except for one person who's like, I'll make them play that. But then they
But one of my friends was playing [INAUDIBLE]. And he had-- he was in a situation where he could make arbitrary many copies of his card. And every time he made-- his copies would last for one turn. He'd [INAUDIBLE] And so, he ended up-- [INAUDIBLE] made him go through [INAUDIBLE] and said, [INAUDIBLE] and click, and actually make 50 copies of his card. He just spent almost 10 minutes going through and making copies of this card. And if he just clicked-- if he made a specific [INAUDIBLE] that was easy to make, he would just lose the game. So--

PROFESSOR: So, yeah-- so execution error-- I mean, that happens even in real-time games like *StarCraft*. Yes, you should not be able to win this game unless your opponent makes a huge mistake. And if you're-- that happens, by the way.

AUDIENCE: There's another interesting thing that happens from hidden information in *League of Legends*, where, as a spectator, you can see how much gold both teams have total. But you can't see, even, how much gold your own team has total, when you're actually playing. You can only see number of kills, and maybe number of towers, and relative farm counts, basically. But you can't actually tell, oh, we're actually up in gold.

So some of the interesting things will happen where a team can be down eight kills or 10 kills or something, but still be even or better in gold just from having gathered different objectives and more [INAUDIBLE] and stuff.

PROFESSOR: And I think bringing this to a point of design, whether you allow players to concede the game in progress has, actually, been something that's been actively enacted in *DotA*, and *Moebius*, games like *League of Legends* and in *DotA 2*. *DotA 2*, in particular, for a long time-- and I'm not sure if that's still the case-- actually did not allow you to concede the game in progress. Can anyone-- does anyone play *DotA 2*? Anyone confirm this?

AUDIENCE: Once. I think it still doesn't allow you.

PROFESSOR: Still doesn't allow you?

AUDIENCE: I haven't played in awhile.

PROFESSOR: OK, it's definitely one of those things that struck me as, what? And it's because of these reasons. It's because-- just because you think that you've lost the game, doesn't necessarily mean that you lost the game. And the designers decided that it's more important that you fight
it out to the bitter end than to concede.

But of course, just because you can’t quit the game, doesn’t mean that you can’t quit the application--

[LAUGHTER]

PROFESSOR: --or [INAUDIBLE]. Huh? Yeah? What?

AUDIENCE: [INAUDIBLE].

PROFESSOR: Yeah, [INAUDIBLE]. Or you could just choose not to do anything-- deliberately walk into your opponent [INAUDIBLE]. Let’s see, your hand?

AUDIENCE: The reason-- one of the reasons that I don’t play DotA is because they don’t allow you to quit. It’s irritating to me when the game is clearly over for me.

PROFESSOR: Yeah, I mean, it’s a good 40-plus minutes per game.

AUDIENCE: Yeah, it can take a long time to finish out a game.

PROFESSOR: Yeah.

AUDIENCE: And I want go do something else, or I just want to take a mental break. And they won’t let me.

AUDIENCE: I watched the presentation on [INAUDIBLE] last week in another-- in a class I’m taking. And I believe a lot of the justification for that was also that it irritated people who were allegedly more serious gamers, because there are all these people just casually playing the game who will just give up. They ruin it for the rest of us who want to keep playing.

PROFESSOR: Yes. They are the ones who feel if you are slightly behind you can still fight back. Whereas, people who just play this game to chill out. They’re just like, oh, I don’t feel like fighting back right now. Let’s start a new game. And if they had the ability to concede they will do that.

AUDIENCE: I was just thinking that don’t the most serious of gamers join with the team and they’re on the--

GUEST SPEAKER: Yeah, absolutely. And even when you’re playing by yourself in these games, high level players don’t concede, because they know can come back.

PROFESSOR: But it’s a spectrum, right? You don’t start off by being serious. You start off by being sort of, hey, what’s this game all about, and end up this middle tier-- well you’re still playing with
strangers, but you are getting really interested in doing well. And right now Todd Harper, which I was describing, is actually thinking pretty hard about what is the value of having taunt as a game mechanic.

Fighting games have that action which deliberately wastes time and opens you up to attack, right? But the whole point is that you will do that in order to-- It's the digital equivalent of trash talking. I'm going to make this move, deliberately making myself vulnerable. Because I know I cannot lose this game, because you are so bad. Or I think you are so bad. I think there's things like that in *League of Legends* although I don't know about the others.

And so the question is, what is the real value of that? You can already taunt. Especially if you're playing something like an online game on the computer, typing up a taunting comment takes actions. That means that it takes your fingers away from actually playing the game, because you have to type these words out. And as a result of that, it's already a drawback to be able to do that. Why do you need a game mechanic? Which means that game designers are explicitly supporting you doing the taunting.

**AUDIENCE:** I think that actually, at least in *League*, when you have a character you have four. I think it's joke, laugh, taunt, and dance. But actually people just do it for fun. For example, with high ELO streams sometimes all 10 people will group up and have dance parties, in close agreement to not fight and just goof around. Other times it's really funny. I saw this stream where Sion was getting jumped on by two people and decided to dodge a skill shot by doing a taunt, which is taking his axe and going like this. And then dodging the skill shot, and then just walking out. So that's just funny little [INAUDIBLE]

**PROFESSOR:** Right. In *Starcraft* you can make your characters dance just by clicking back and forth real fast. Then they just walk left, walk right, walk left, walk right. And I've seen that and other game mechanics that aren't explicitly taunt mechanics. To be able to tell the other player, no. You've basically lost. You should just concede now. Or even if you don't concede, I'm going to win this game anyway. So you might as well concede now.

But then they also have a slash dance command to actually make your characters dance. And that's a game mechanic, right? When you fight slash dance you do no damage, and you will take whatever damage is being inflicted on you deliberately. And I've seen a couple of games lost because someone decided to type slash dance. And that's the risk. But again that's the game explicitly supporting this this sort of behavior.
It's supposed to be meta. It's supposed to be the sort of thing that happens above the game. We're going to be playing a bunch of games. Obviously these are board games. The talking, the communication, what's going on in this game? And what are you going to take out from the game? It's all happening above the board as opposed to inside the game. Except for Space Alert. Maybe Space Alert it is all just part of the game.

I want you to be thinking about this, about what's happening above the table. about what it's about. Information they are exchanging or interactions they are having that's not part of the game itself. So what does the game explicitly do to be able to support social interaction? To be able to either support the kind of social interaction that's happening inside the game system, or to be able to draw on the social relationships that you have with other people on the table to be able to enhance the game experience. Did you have your hand up?

AUDIENCE: So in League, theoretically it can be real-- there are people who often-- The enemy should not just try to use their abilities on me because I taunt them. There has been a case. I just sit there taunting and then their enemy uses all their abilities on me. And then my team ends up winning the fight, and the record off of that. Sometimes taunting someone will have an actual impact.

PROFESSOR: But you could arguably have achieved the same goal without and explicit taunt, right? You know, just by standing right in front of your opponent.

AUDIENCE: In your taunting you're telling the opponent that you're not really paying attention. That you could also be attacked. You're less likely to dodge that move.

PROFESSOR: True. Something to keep in mind when you're designing your games is that there are all these things about how it would be fun to be able to design mechanics to be able to support these kinds of social interaction. But you got to be very, very careful. Right? And every time you design something you're both giving your players a tool to do something else and it's now officially mandated by your game. Because you have a rule that actually says that this is something they can do. And they may use that rule creatively. Or they may use that rule destructively.

Again it all comes down to testing. You don't always know, but you should know what you're trying to achieve with the game socially when you're making a game. You should have that conversation today when you finally break up into your teams. But for now what we're going to
do is just play a bunch of board games But primarily about social play. And then on
Wednesday I think we’re going to bring you [INAUDIBLE] games with very changing rules.
John, you want to talk a little bit about these games that you brought?

GUEST SPEAKER: You want to do it right now?

PROFESSOR: Yes. And then we'll get all the games out and have a break simultaneously. All right, I'll start with this one. Has anyone played this? OK, maybe you could help me explain it.

GUEST SPEAKER: I watched two hours of videos and I don't really get it. There is really a lot to it. There is a lot going on. But the gist of it is that everyone gets to pick a role. And each role pretty much stems straight from the TV show. Have you guys seen *Battlestar Galactica*? It's a really good show. It's on Netflix. You should go check it out. And actually it seems like the consensus on the board game community online actually really like this game. So it seems there's a lot to it.

But essentially you choose a character from the game, and they have different powers. Some of you are human and some of you are Cylon. The Cylons are robots that look just like humans. So there's spaceships coming to get you, and some of the Cylons are on the ship. And their goal is to basically wipe out humanity. And the human goal is to survive and you don't know who is who. There's a critical moment in time where the Cylons will reveal themselves and get even better powers.

So there's lots of cards. So there's a military leader and a political leader. And they each get different decks of cards. If you're the political leader you basically can put people in the brig. There's so many components.

AUDIENCE: It is, I'll say, the most complicated game that I've ever played. And this is true of many replays.

GUEST SPEAKER: I think you have to find it fun, because after you invest all that time to learn how to play it, you're not going to not play it.

AUDIENCE: A lot of the rules are sort of unnecessary. You can literally clear 90% of it. And the end of the game has all these weird rules. It has too many rules, but it's still fun.

GUEST SPEAKER: Yes. So depending on who you are, you can either be a military leader, a political leader, or you could be a pilot. The political leader gets to put people in jail. The military leader gets nukes, and they get to strategically use them against the enemy. And whenever there's a decision that has to do with fighting, they get to take the lead on that. So there's different roles.
And it's interesting that each role has different decks of cards that support that role.

The turn is really complicated. It's a bunch of sets. You draw a card, and then you collectively face an objective, a crisis. And you all have to vote for commit resource cards, of which some can be good and some can be bad. So the Cylons try commit bad resource cards to make sure that this objective is not completed. And the humans tend to put in the good ones so the objective is completed.

But there's a lot of meta-game where the Cylons don't really want you to know that they're Cylons. And then there's special abilities where you can flip a card up and see what everyone's resource card is. I think they're called skill cards. It's a cool simulator. And you can jump. There is so many components. We probably don't want to play this game, because I think that the play-through is two or three hours. But all the [INAUDIBLE] you might want to change.

PROFESSOR: It's a great game to know about. It's a great game to play, if you've got a full weekend dedicated to board gaming or something like that.

GUEST SPEAKER: And there's expansions, too. This is a pretty popular game.

AUDIENCE: I think we can play this in two hours.

GUEST SPEAKER: I think you'd have to leave it, though, to explain it to everyone.

PROFESSOR: I want to make sure there's enough time for teams going to help you to verify [INAUDIBLE] So there's probably not enough time. But I ask you to do that so that people will get a sense of what is involved. Also look at it a bit. One of the nice things I like are these little counters. It's just a counter. Five, four, three, two, one, 0, which means you have normal pod condition. But it's a nice way to be able to keep track of stats.

GUEST SPEAKER: Is that OK for that game?

PROFESSOR: Yeah. That's great.

GUEST SPEAKER: This game, Space Alert, has anyone played this one? It's really cool. I think this game is really neat. Maybe I can talk about the board? It's this cooperative game. And you're playing as a team. You're this crew on a spaceship there. And it goes like this. You have 10 minutes to prepare a hyper jump. And during those 10 minutes new information is coming in from the
audio CD that you play. There's 16 different tracks, so there's a lot of replayability.

And at the end of the game, there's this frantic playing phase. And there are going to be periods where you can't talk to your teammates. There's periods where you can trade cards. And basically there will be these trajectories, depending upon which enemies. So there's the red part of the ship, the white part of the ship, and the blue part of the ship. They each have an upper deck and a lower deck. And there will be enemies coming at you from space. And you man your shields, but also use energy to shoot the objects down and basically survive. And if they do six damage to any one part of your spaceship, then it's game over. When you take damage you get certain debuffs. Your shields would become weaker.

So you have little avatars that move around on the board. And you need to be in each room to do your action. So there's an A action, a B action, and a C action. So just taking a look at the white one, you all start here. The C action is the computer, so the first two moves of the game. I think there's 12 moves, and there is three sections. And the first two moves of each section you have to have someone be the computer. This is the gun and the shields. The gun and shields are powered by green cubes that go down here. And you have to constantly be replenishing them.

There are also internal threats. Creatures will crawl into your spaceship, and you have to get these bots up and running to take care of them. There is some really good tutorials and play-throughs on YouTube. So if you don't get a chance to play, you should definitely check it out.

**PROFESSOR:** The play-throughs on YouTube are probably pretty hilarious, I'm going to guess.

**GUEST SPEAKER:** They're amazing. I saw this solitaire one where this guy was playing solitaire. It's a really good way to learn the game.

**PROFESSOR:** Playing the solitaire is probably a lot like playing *FTL*, if anyone's played that on iPad or a computer.

**GUEST SPEAKER:** It reminded me of *FTL* quite a bit.

**PROFESSOR:** You imagine *FTL* where every single member is actually controlled by different players, then you start to get several more people there. So you put these action cards down, but you don't actually resolve the game until after 10 minutes are over. There is different difficulties, so you can put in harder cards. There is a lot of details that I am missing.
The primary one is that if you've played RoboRally, or any other kind of game that's got a little bit of a program event to it, you're basically programming your character to do these things. You're kind of figuring out and visualizing where things are going to go. And you can talk about what you are going to do, and what to do at specific turns. But you won't actually know how it actually runs out until after the 10 minutes is spent. And a big part of the fun is just flipping over the cards, seeing what people actually did. Realizing that oh no, wait, we both clicked the same button at the same time.

Or you're in the wrong room. You think you’re in one room, but you're in another. And you're clicking the wrong thing. Or two people take an elevator at the same turn and it will actually delay one person's actions a bunch. So all your cards are laid out and that's your plan, but then a delay happens and you have to shift all your cards to the right.

It's a game about coordination where every single mechanic in the game is to prevent that coordination from actually happening.

If you listen to the tracks, there are periods where you're not allowed to communicate, which can be really frustrating. And it's constantly throwing new monsters at you from all different directions. So managing where the monsters are coming from, where the threats are coming from. These are the cards that either move rooms, either to the red side or to the blue side, where you can hit buttons. And you only have a certain amount of these in your hand. And you have to coordinate with your teammates at a certain point to get the action that you want of your team. Is there anything interesting?

Pandemic.

This is a co-op game where everyone on your team is playing against the board. You are playing against the computer. So you're all a team and basically there's four deadly virus outbreaks all over the world and they're spreading. And you need to research the cure. There's different roles, which is cool, because in co-op games we have roles. So there are five roles. So at each turn you pick a couple cards. And basically there are cards. There's cities all over the map. And your little guys go all over the world for treatment with these, set up research centers, research cures.

And you need a certain amount of cards, like five of that color. And you have the role of your researcher, you only do four. So the medic can cure people faster. There is a logistics guy that can fly people around the world with ease. And you only have so many actions. And constantly
there will be breakouts where if you get too many diseases in one area, it will cause the neighborhoods around it to be infected. So you have these chain reactions. Again, coordinating well with your team in a cooperative manner for a cooperative gain, which I wasn't able to do. We lost a bunch.

**PROFESSOR:** It is a tough game. But the more you play it, definitely the more you start to get used to how the systems work, especially the explosions, the virus explosions. Forbidden Island is same designer. And I feel the rules are a little easier to understand. It's not actually all that different a game. We'll also bring it out for you to check out. And these three games over here? Shadows over Camelot. The Wrath of Ashardalon. We're here primarily so that you can take a look at that them, but we don't have enough time to play games in class today. Shadows over Camelot is basically, is sort of Arthurian traitor mechanics.

Ashardalon is actually just Dungeons and Dragons, only packaged into a nice little-- You don’t have to think too hard about creating your own character ahead of time. So you can just jump right in and get into the playing part. It's kind of interesting. They take a chunk of the meta out. The whole, how do you create a character for instance. Which a lot of people do enjoy Dungeons and Dragons, but it does take an awful long time. And how do create a campaign? Well, the box comes with the campaign and all the maps that you need. So this is basically one box, a Dungeons and Dragons campaign. That's going into dungeons and killing monsters and getting loot. I think we just played this one.

**AUDIENCE:** [INAUDIBLE] I just played the expansions-- [INAUDIBLE] fade in and out of reality. [INAUDIBLE] jump between different zones.

**PROFESSOR:** I could see that.

**AUDIENCE:** If there is-- there is [INAUDIBLE]

**PROFESSOR:** A lot of expansions are designed for people who’ve mastered the original game. Because theoretically, if you play the game often enough and you’re coordinated enough as a group, you should be able to beat everything that the game throws at you. Same goes for Pandemic. The question is that coordination part and some luck of course. All the audio tracks will also be available on MP3. If somebody wants to play Space Alert, I would suggest actually taking a corner of the room, maybe that one. Because you need to be able to hear what's going on. Actually, could you just plug it in there?
AUDIENCE: It's pretty loud. If your computer has a CD drive you could do something over there.

GUEST SPEAKER: I feel like the tracks are designed to disorient you.

PROFESSOR: But you need to be able to hear what's going on. So it needs to be loud enough that everyone around the table can hear on top of all the talking that you're going to be making in the game. So give it a try just on the computer speakers. If we can't hear what's going on, then we'll try it again with other speakers. We should definitely be able to hear. Definitely try to pick a corner where the noise of the other games isn't going to bother you. Also, just take a look at the parts.

AUDIENCE: Two to four players for Forbidden Island, it takes about half an hour. Two to four, for Pandemic?

GUEST SPEAKER: For Pandemic two to four.

AUDIENCE: And then this one, one to five.

[INAUDIBLE]