So some of my perspective on what kinds of things you can do in relation to game mechanics is kind of like seeing [INAUDIBLE]. But it's not the be all and end all. I'm basically showing you my perspective but it's not the only perspective out there. I have very little that I feel qualified to say about *things like sports.* Things where we are talking about athletic competitions. Faster, higher, stronger, that sort of thing.

But I'm a little bit more engaged in games where there's role-playing. Where you're taking on a persona or at least some sort of behavior that you aren't just normally doing in real-life. It's not just about how fast you can run or how skilled you are at hitting the ball. That sort of thing.

Let's see, and not every single live-action game needs to necessarily fit within role-playing sports. You've got things like party games. This afternoon we'll have the lead designer for *Dance central* coming in to do a little Q & A about *Dance Central* around 4 o'clock, 4:30, in the TV lounge. You guys are all welcome to do that.

And that's arguably a live-action game. Sure you've got a computer, you've got a-- how much is the Kinect? $150 piece of equipment connected to a $250 Xbox hooked to a screen that's probably more than that.

You've got all this technology, but in the end, what's that game about? What's*Rock Band* about? It's about the people who are in the living room. And what is one of the arguments that [INAUDIBLE], in a different chapter in *Casual Revolution*, he argues that one of the big things that's happened with gaming is this re-introduction of the space in front of the screen. The living room space has come back into play.

You haven't lost that with board games or card games, but for electronic games really it used to be something that existed with arcade games. You've got these giant motorcycles or steering wheels and stuff like that. And you still had it with some really expensive computer games like flight simulators where people buy the joysticks. I'm a big train fan, so I've got a Playstation One train controller. It's throttle and brakes. That's all it is. No steering when it comes to trains. It's a lot of fun.

With arcade games, and of course [INAUDIBLE], there's this whole idea that you're going to be engaging your entire body. And you could argue that those are live-action games. And you take the technology out and what you've got is just this human body playing with all it's constraints, beholden to gravity, it can't move faster than a certain speed, it's kind of ungamely, and it's got roughly a certain size.

Gives you constraints that you can work with in terms of game mechanics. One of the things that we did last year was we had a live-action game assignment in this class. And the constraint was you had to be able to play the game in this room. Was a newspaper a constant?

GUEST SPEAKER: No.

PROFESSOR: That was one huge decision to use newspaper as a constraint. But they did things like blindfold people. They were playing around with the senses on the body so that you could hear. When one person had unlimited ammunition, in terms of low vaulted newspaper and the bucket, but couldn't see where everybody else was.

And everybody else could move around the room on sheets of newspaper. They had to step on sheets of newspaper. So you could always hear where they were stepping.

And the person with the bucket was trying to pelt the people who were stepping on the ground. If you got hit you had to go out of the magic circle and then start coming in. The whole idea was to attack the person who was actually throwing all these newspaper balls. We had a little newspaper hat that you could grab. It was pretty awesome, because what you need to play that game? You need one set of rules, and a chair, a recycle bin-- specifically it was that bin-- and newspaper.

But there were all these things in play about what you can do. So OK, your target is going to be roughly the size of a human body, and roughly the weight of a human body. It's going to be able to move at roughly the same speed of a human body. And you cannot have multiple targets in the same place at once. In fact it's hilarious when you try, because you've got these [INAUDIBLE].

And because you're playing with the humans, all five of the human senses, usually just like hearing. I don't know that anyone's made a smell game. But you will have the situation where the people who are standing on the newspapers will try to make noise near the other people who are playing the game. So they were drawing attention away from themselves. Sometimes it works. Sometimes it doesn't. Sometimes it leads to hilarious collisions --a good time was had by all.

And those kinds of party games. You know,*King of the Hill?* Can anyone think of any other playground type games that are personal favorites?

AUDIENCE: Freeze tag.

PROFESSOR: Freeze tag?

[? AUDIENCE: Lava.

PROFESSOR: What's?

[? AUDIENCE: Lava's where you have swings and all things you can climb on. And you're playing generally on the little pebble-like rocky stuff. And if you step on the pebble stuff that's like the lava and you get burnt. So you have to stay hanging on the metal part. And usually there's someone who's immune to the lava trying to tag you. So they can walk over the lava but they can't go in the structure.

AUDIENCE: Lava monster.

PROFESSOR: Does the game ever stop? Just out of curiosity?

AUDIENCE: Yeah, someone becomes the next lava monster. Once you get tagged you switch roles and keep doing it.

AUDIENCE: But the thing is, I never played that on my playground. I always played in my living room and throw couch cushions on the floor and stuff.

AUDIENCE: That sounds really dangerous.

AUDIENCE: We'd have wheely chairs and push off and yeah.

PROFESSOR: I used to have a water bed. So there was some unpredictability that I could have in my bedroom with my two brothers. But they were both bigger than me so I always lost. I mean, you can think of-- on one hand, these are athletic games because they do test your ability to move and control your body. Which is why they're so popular around kids who are trying to master what their bodies are capable of.

But on the other hand, they're also games of mimicry going back to [INAUDIBLE] definition. Because you're pretending that it's lava, and pretending that you're a person that cares that it's lava, or a monster that's immune to it.

And these games don't necessarily-- they may have some rules about, OK you can tag now we swap. I've seen games where sure, I've technically been tagged out of this game but since this game really has no end state that just means that oh, I lost. Now I'm back in the game again. It's like playing a *Doom* death match and you die and you're just right back in the game again.

Let's see, anyone play those-- what's the name of the football variant where you just have a scarf attached to you?

AUDIENCE: Flag football.

PROFESSOR: For those of you-- everyone knows what it is?

AUDIENCE: Isn't flag football where you just have a flag and instead of being tackled you?

PROFESSOR: Yeah, instead of tackling you just grab the flag. And that's an abstraction. That's an abstraction of something that you well could physically do. You could grab this person and pull them to the ground.

AUDIENCE: Does touch football exist?

AUDIENCE: Yes.

PROFESSOR: That's a smaller level of abstraction because you can really hit someone pretty damn hard with touch football. But it's an abstraction of, here's this thing that I personally, physically, could do. But I'm going to introduce this level of abstraction for-- I don't know-- safety. That's usually the reason.

And so you've got the human body and you've got all of its values and virtues and all of its curses. You've got issues of safety. You don't want people to hurt each other, but yet human beings and their bodies are extremely capable of hurting each other with no added implement at all. Even worse when it gets to a game and someone's trying to win something.

If you don't have a specific rule that says you can't punch this person, but you have a game that's very athletic, someone's going to try. That's why you get these sort of abstractions to pretend in that military form that all right, I've grabbed this thing off you. Now you have just been tagged. I've effectively tackled you [INAUDIBLE].

So, what I'm trying to draw attention to with these examples is that with live-actions games the thing that you have to keep in mind all the time is at what point is the person who's playing actually the character who's playing? It's really, really, hard to tell when it comes to live-action games. If you are playing in sports it's the same thing. Any given athlete and their performance in the sport is who they are. It's the same person.

If I'm role-playing then the person that I'm playing is not supposed to be the same. But there needs to be a whole bunch of rules that basically specify that the character that I'm playing is not actually the person that you're seeing in front of you. For that time, the player is not the Count of Monte Cristo or something like that.

AUDIENCE: One interesting exception to that is wrestling. Not wrestling like actual high-school wrestling, but wrestling on TV-- I don't remember what it's called. Because everybody puts on a persona. They're never the same person that they are. I just thought it was interesting when you said that any sports person, but that's one exception.

PROFESSOR: That's true. And that creates a lot of discussion about whether wrestling is a sport. It's athletic. Everyone agrees that it's athletic. But so are trapeze artists athletic but you wouldn't call it a sport. And in fact, if I understand correctly, wrestlers are insured as circus performers, because they have the same risks and are playing the same role as a performance.

But you're right, that's one of those things where it's a persona. The really, really, good wrestling networks play around with what's real and what's not. Yeah sure, these two people are putting on these ridiculous personalities. Threatening to kill each other over the most trivial and made-up of the offenses, and crazy accents, and costumes, and everything.

But when they're bleeding they're actually bleeding. There's no denying and no doubt they actually get angry with each other and people actually get hurt. And playing around with that line is actually some of the appeal that we get in things like professional wrestling. I guess that's what the terminology that they use.

It's very different from something like mixed martial arts. I don't watch mixed martial arts.

AUDIENCE: No, I don't think so, I'm pretty sure it's just flat out.

AUDIENCE: [INAUDIBLE] are very associated with the person.

PROFESSOR: So they are the persona.

AUDIENCE: They don't have stage personalities, but they do have strong personalities.

AUDIENCE: That's definitely a sport. I mean, they're actually fighting.

PROFESSOR: I mean let's take a look at Muhammad Ali for instance. Extremely athletic person but his personality had a lot to do with it as well with how successful that he was. The way that he taunted people on TV and on cameras before the game, so that people would get all worked up for the game, made him a star. Sure he was athletic, but that was part of it.

So where that line is, and as designers you get some control over that through the rules that you're writing. And there are a couple of tactics that you can focus on. But I want to segue into-- that's the tension. That is one thing that's pulling your design in one direction.

Which is, how am I going to figure out what the difference between the person who's playing this game and the character that they're playing, or the role that they're playing, is going to be. In your games, for this next assignment, if you've got people playing mental patients then you've got to figure out how you're going to draw that line.

You've got to be clear whether it's the player who's actually upset at you or the character who's actually upset at you. But if you draw that line too broadly, then you've got the situation where both be angry at you [INAUDIBLE]. Because this is a ridiculous situation and emotional. Pretending to be really emotional can usually make a lot of people react by laughing just to release the tension in space.

In fact, that happened when Dion was role-playing with Caesar, right? Sure, they were laughing. They were trying to level that and take it as seriously as possible, and everybody else in the room was cracking up. To release that tension. And sometimes that's OK playing games. In fact, sometimes that's great for the game. And sometimes that's detrimental.

Depends on what you're playing for. But you have to understand that is something that's pulling the overall design, why do rules exist, and why your game mechanics exist, and why your game mechanic is pretending a certain way. That's one of the tensions that's pulling it in a certain direction.

And in reality, that's actually two different tensions. Because in one sense, they're trying to make an experience as aversive, as feeling like you're actually doing it as possible. And on the other hand, you don't want to make it so associated with who you are, and what you're actually doing, that people start to think, oh wow. This person, this player, is actually mad at me. Or, this player could actually hit me at this point. While as, no the character [INAUDIBLE].

I call that verisimilitude. These are just words that I picked up from dictionaries. This one, you were in my masters thesis. Verisimilitude is basically a tension when you're designing a game mechanic. And that tension is telling you, I want to make this experience as immersive and as true to life as possible.

And the opposite of that is what I call dissociation. Which is really hard to pronounce. It's not like I just call it separation. But, how do you draw that line between who I am and who my character is? And I'll give you a couple of examples just to get inside this now.

Who doesn't know what a live-action role-playing game is? Or doesn't have a good clear idea? OK. So maybe, a little bit of background just so that I can use the examples. Do you folks know how a table-top role-playing game generally works? OK.

So, start from scratch. Imagine improv theatre. Imagine you have an environment where you have a bunch of people who want to enact some sort of scene together. In theatre, a scene is usually something like five minutes, maybe half an hour. In a live-action role-playing game, that's more like an hour to 10 days to 30 days long. A much longer period of time. But the motivation is the same. We're in this space to enact some sort of shared reality, shared creative reality, together.

In a role-playing game that's done by the usual addition of rules. And usually some sort of world setting and some sort of character description. And how these things are told to you could be as simple as the game master walks up to each person and explains what's going on.

You are all cats in an alley-way and some of you are hungry and looking for food. Some of you are on top of the pecking order and make sure you get all of the food. Here's how you eat food. Here's how you move food around. Go. That sort of thing.

A game master could just do it at that level, and you've got a live-action role-playing game. There's usually some sort of end condition or at least some sort of time limit to tell you when the game's over. When you get a little bit more detailed, and when you start mixing and matching it with the conventions of other kind of role-playing games-- computer and table-top role-playing games-- you have things like character sheets where you're given your information on a piece of paper, or you create your information on a piece of paper.

And that information is information that's only available to you and the game master. A secret information for all intents and purposes. You will use different means to convey chunks of the information to the rest of the world. Like I'm actually not female, but I'm playing a female character. So maybe I'll wear a badge or something that has my gender on it. And that tells the rest of the world treat me like a female. That's one example.

I may actually be psychic, but the rest of the world can't necessarily see that. Except for maybe other psychic people. So maybe I'll have a little Greek symbol or something-- not Psi, that would be too obvious-- or maybe my badge is just a different color or something. And people who are not psychic have no idea what that means. And people who are playing other psychic characters now see, [INAUDIBLE] has a red badge. I am sensing psychically.

And then there are other game mechanics that I can do with that person. Actually all the psychic people know each other's cell phone numbers or something and can talk to each other. That's an example.

AUDIENCE: That's awesome.

PROFESSOR: That would be to your advantage. So the connection with improv theatre is actually stronger than a lot of people may generally assume. Because a lot of people think of live-action role-playing games and they focus on the games part of it. And they think of it as a RPG in the computer sense.

So your role is your character in the sense of, I have my character's stats, my character's abilities, a lot of these steps and abilities don't necessarily need to be written down. Because, again, you're dealing with a human body.

So, how strong is my character? I don't know. How strong are you? How long a sword do I have? Well, how long is that piece of foam over there? That's your sword now.

AUDIENCE: [INAUDIBLE]. I played a character that was supposed to be very, very, strong. And I am not very, very, strong. But I had a disclaimer badge and the that it manifested itself in game play was that at some point they challenged someone to an arm-wrestling duel.

And they made sure-- they looked at my stat and saw, oh I know what this means. And so even though they were about twice my size they pretended to lose. It was very entertaining.

PROFESSOR: So the spectrum of on one hand there are these games. The type of games that Jeremy describes allows you to play things that are physically very different from you. And then there are some live-action role-playing games--

AUDIENCE: Where it's just how strong you are.

PROFESSOR: --Yeah, it's just how strong you are. A lot of those are like [INAUDIBLE] LARPs, where people will dress up in actual armor that they've decided to make out of leather or duct tape. And they will swing around swords instead of foam padded. They'll go out to a forest somewhere-- typically in New England-- and spend two days, three days, in the middle of a forest sleeping in a cabin somewhere and pretending to fantasy adventure it. And every once in awhile there will be GM controlled volunteers who will be wearing [INAUDIBLE] masks.

That's on the other spectrum. It's a spectrum. It's not like the [INAUDIBLE] LARPs where you run around with sticks and are Assassins Guild type LARPs where most of your abilities are governed by numbers and stats. Kind of this spectrum. You can think of assassin guild type thing as being very much inspired by what you could do on a computer or what you could do on a table-top LARP. Because on a table-top LARP, how strong your character is has nothing to do with how strong the player is. It's what [INAUDIBLE].

AUDIENCE: Playing a game just recently, I found out that in New England there are basically LARPs which get done with rifles.

AUDIENCE: They're military level.

AUDIENCE: But they're not paintball. So you shoot people.

AUDIENCE: With plastic pellets?

AUDIENCE: Yeah. Yeah, air-soft is what they call them. And so one team will dress up as US soldiers, and the other ones are like middle-eastern soldiers. It's elaborate and slightly distasteful. You can go and look at their website. I think it's the New England Airsoft Association or something like that. And they have excerpts of a video cam of these.

And there's negotiation between the two sides and what have you. They actually take on the roles of the insurgents or the [INAUDIBLE]. Sometimes they're just shooting each other. Other times they're trying to find out who in the town who is the bad guy.

PROFESSOR: Sometimes it gets more elaborate. And some of us are actually going to be [INAUDIBLE] and some of us are actually going to be combatants and you have to figure out who's who. That one will be really, really, interesting [INAUDIBLE] for IEDs. That's something that annoys me about games that involve Middle Eastern combatants. Is that, they don't have rules for IEDs. And that's the primary form of contact in those states.

That's to the point. Military exercises a lot of them are basically live-action role-playing games. All the way from I'm actually running around with a gun full of blanks or shooting pellets or shooting a laser beam that is going to register on some other soldier's gear.

AUDIENCE: We call them war games.

PROFESSOR: We call them--

AUDIENCE: [INAUDIBLE].

PROFESSOR: --Yes, that's a good thing. Then you also have the other end of military simulations where it's just a bunch of people in a room looking at a screen. Or not even a screen, a white board with a world map on it, and they're moving forces around like a table player. But those are still considered live-action action things, because every person in the room is representing someone in the chain of command that would normally be in a war room attack.

I am the commander. You are the lieutenant, or something like that, and I'm going to say, get me the status of Washington D.C. Has it been nuked yet? And the lieutenant says we have three missiles coming in based on some look up.

The term for that is typically called creep [INAUDIBLE], especially when it's real people playing against real people. It's two or more player game where not everyone is one the same side. If it's just on one side then just the war game terminology tends to be more a catch all.

But when you have two players on each side, and are playing through these things, how results get resolved also can vary. There are obviously digital and mathematical ways to compute. OK, I've given an order to fire a missile at Singapore. And it's going to take two hours for it to land. And there's a percentage that it might land. You could do it. You could do that way.

But traditionally, what's actually been done is that you say this is what I'm going to do. And someone far more experienced than you, usually your instructor or one of several instructors, takes that information, goes into another room, and talks to the people who are actually doing the same thing with your opposing team.

And they're just saying, OK in this event what's going to happen? And then they go back to each team and they report, missile missed. Or, your troops engaged. You found your opponent's troops at this location and you've lost 50% of your troops. That sort of thing. And that's the traditional [INAUDIBLE].

The nice thing about that is that takes advantage of the fact that not just the players but everybody is a live-action human being. Because you have flexibility. You can do ridiculous things that programmers or game designers may not necessarily have assumed were possible, but happen to make sense in the heat of that particular game.

And you have real people deciding, this is what's going to happen. So we'll make up a logical solution. In the military, that's why you want people who are really experienced. In a non-military live-action role-playing game, like the kind that's played around MIT, people will still do that.

So I'm in a game where I have a steampunk setting. And I don't have all the equipment I need to build this machine of death that I'm supposed to be completing. But I could take apart some of the other machines that are in the world. And then the game master says, wait a minute. We've got to put rules about that.

Or, we don't want to start anyone taking apart [INAUDIBLE]. But it makes perfect sense in this world. So, OK, it's going to take you two hours and you have to be in this room. But after that, you'll have the parts you need.

The other side of live-action role-playing is that often the people who are controlling the game of live-action say that wasn't fair. And again, they can improvise along with the players. So you have that bit of flexibility. You're limited by how experienced most people are. People who don't tend to be terribly experienced tend to make rash decisions that end up hurting the playability of the game. Sometimes they get lucky. Sometimes they don't.

Let me see, one example early on when I was making live-action role-playing games, was I had a game mechanic where if one of the police officers in this sort of detective scenario wanted to do a background check they could ask the game master. Some amount of time-- actually it was fairly instant. Because the very molded kind of system. The assumption was that they will find a computer and they'll look it up. And we'll give them information.

And that led to two problems was that, first of all what happens if I'm not physically in the same location as the person who wants the information? And this is weird to think of a computer with legs walking around. It sounds very science fiction. And on the other hand, it means that I needed to have all the information about everybody at my finger tips at all times. Which often wasn't true.

So someone would come in, I need the information about this character. I'm performing a look up. And it's like, I'll get back to you in two hours. Because I don't have the information here with me I'm going to look it up and I'll give it to you later. Now I don't make that mistake anymore, but that was the kind of mistake I made when I was a [INAUDIBLE]. Because I hadn't really thought about what that would require from me as a game master.

Now that's a different tension. I am actually going to read a chunk of this-- [INAUDIBLE]. I talked about dissociation or separation. And what I'm talking about with that mistake that I made is just plain old feasibility. Something that you probably have already run into it with the games that you've designed.

AUDIENCE: Yeah.

PROFESSOR: And many of the games that you've designed [INAUDIBLE] could have thought of as just plane of scope. It's like, how big is this game? How long is it going to take us to put all these bits together? [INAUDIBLE]. Can we order these bits in time? And are they going to be delivered in time for the class? I know multiple teams had this problem.

AUDIENCE: [INAUDIBLE].

PROFESSOR: Let me see if I can combine some of these ideas together. One thing that the *Assassin Guild* likes to have are people who have locked memories. They know something, but they don't know that they know it. Little memory packets, little pieces of paper that they printed out and folded up and stapled. Takes you about 20 seconds to make one of those.

Now imagine a game that has maybe 60 people. And each person maybe has five locked memories because the GM's really love the idea. And 5 times 3 is

AUDIENCE: That's only about an hour. Only about an hour.

PROFESSOR: Only about an hour. Does it ever only actually take an hour to actually produce that? You get staple cuts and you have to write them all.

AUDIENCE: It's a little less than two hours actually.

AUDIENCE: No way.

AUDIENCE: 20 seconds per 60 people.

AUDIENCE: But it's not 20 seconds each.

PROFESSOR: And then what happens is that oh, wow, we have 300 pieces of paper all of which are now folded and almost indistinguishable from each other. And we've got to figure out who gets which. And these are the concerns. That's a feasibility issue. Doing something like that for one or two players is extremely feasible. It takes almost no time for the game master.

Doing that for your entire player base, if you have a 60 person game, on the large scale becomes the majority of your prep time. Suddenly you're setting aside a whole day just to deal with that. And a game's only three days long or something like that. With that level of effort.

Things to preserve the game master's sanity. The MIT janitorial staff, facility staff, are pretty ruthless when it comes to picking up stuff that has fallen on the floor. So say that's a really important piece of paper that you've taped up on the wall somewhere's here at MIT. And there's information that this is the place that your players are looking for. They've combed all of campus and they need to find this location.

And that tape that you used just wasn't that strong and it fell. And the janitorial staff just picks it up and throws it away. Now what happens to your game? Can your game even end? Are you just going to have a whole bunch of really tired players chasing you down as the game master?

So the way that you resolve this can be built into the game mechanics. You can build things like multiple redundancy. Like in addition to a sign there will usually be this other thing in this same area. If you find one and you don't find the other, it means something has dropped off. Involve the game master and the game master will go and fix it at some point in time in the future.

If you have a game that has no secret locations, and you have a game that's campus wide, you could just give people a map of all the information. Sure, you still want stuff on the wall because it's neat to be able to walk into a classroom like this and say, oh mortuary. That's where I am. And then suddenly reminded, oh maybe I should be role-playing back then and that sort of thing.

But it's sort of like walking through a space and you have a map that told you you're in a mortuary. But you weren't looking at your space, so you just walked through the space in entry to the classroom. Yes, I am going to do my tutoring in this room. It's a morgue, why are you doing tutoring?

So it's neat to be able to have those things to give players information about what's going on in the space. And to help them make believe, help them imagine what they could possibly do in the space. Maybe even give them clues about what they need to be doing in order to advance their goals.

But then you also want to be able to have backup plans for when those things fail. That's part of feasibility. You don't want the game to break halfway just because janitorial staff came through or the wind blew or something and now your game sucks.

That's another type of information. And that's not entirely unlike the information that we've discussed in this class back earlier this semester. But with live-action games, especially live-action games that don't have any kind of turn based thing, they're happening in real time and they're moving in real-time. Information overload on the player becomes something that you have to be very careful of when you're designing your game mechanic.

How much is someone expected to know at any given time? This is going to be very applicable for any of the games that you design for the third assignment. If you decide to do a live-action game, think about here's somebody who's moving around in a space. Maybe it's a hospital or it may be the doctor's office. And this person is trying to remember X numbers of statistics about their character. How agitated I am, the number that determines how many drugs are part of me right now, and that sort of thing.

You've got these stats. And once again, too high, then what happens is you've got a character that's standing there trying to do all the math in their head and not role-playing. If they're role-playing anything, they're role-playing a mathematician or a [INAUDIBLE] in their minds.

And you're losing the immersion, you're losing the [INAUDIBLE] to be I'm supposed to be an angry person. But I'm standing here trying to do math about how angry I am. And you've got attention of information and very [INAUDIBLE].

There are times when you actually want that though. There are ways to take that and turn it into your advantage. In particular, when the thing that you want people to be doing-- the kind of activity that you want people to engage in-- are the things that players would generally be uncomfortable doing with each other.

Physical violence would be a good example of that. I want to be able to hurt this other character, but I don't want to hurt this other player. So what are the things that I can do to bridge that gap?

AUDIENCE: Insult his mother.

PROFESSOR: Verbally, sure, there are ways to do that. But you might need rules or at least some guidance from the GM to say, take that seriously. Because that can very easily drift into the realm of, yeah that's just a joke.

AUDIENCE: Rock, paper, scissors?

PROFESSOR: Rock, paper, scissors? That could be a mechanic for a fist fight, for instance. Or [INAUDIBLE] that you start see them avoiding that.

AUDIENCE: Nerf guns.

PROFESSOR: Nerf guns? Things that shoot little pieces of plastic. But odds and evens.

AUDIENCE: How about tokens like in [INAUDIBLE].

PROFESSOR: Say what?

AUDIENCE: Health tokens like in [INAUDIBLE].

PROFESSOR: Give me some more detail.

AUDIENCE: Like if someone was a certain number of flags, and so you hurt them by taking one.

PROFESSOR: So the player might have multiple flags for instance. OK, gets them angry. It's like health bar almost, actually.

AUDIENCE: [INAUDIBLE].

PROFESSOR: So dice rolling is under the general term like things randomizing numbers. In fact, rock, paper, scissors, is randomizing things almost. And then you have toy weapons, right? Probably not so relevant for the game violence. But you could imagine setting up a room full of foam things which you will be quite happy to throw at each other.

You know that this cylinder of foam, of pipe-insulating material, is not going to hurt anyone when you throw it. Which makes it more likely that I'm going to pick it up and throw it at someone. Clearly it's something that's designed for me to throw that the GMs put there.

And if you want your players to be engaging in that kind of activity that's technically-- you could have put a real bottle there. You could have put a real mug or computer or something. That's the reason why you as the GM could have, but they are deliberately designing to put something fake there to clue the player into maybe there's something I can do with that I wouldn't necessarily want to do if it was the real thing. I wouldn't want to throw a real bottle at somebody, but I would easily throw a foam bottle at somebody.

Same thing for Nerf guns, dart guns, this guns, it's like you put something with a trigger in somebody's hands that's going to launch a little cheap piece of plastic at someone? They're itching for a chance to use it, really.

Let's see, what else? Dice are difficult. The problem with dice is you need a flat surface to roll them on, and you might not have that.

AUDIENCE: [INAUDIBLE].

PROFESSOR: Still a little bit risky, because they could end up going all over the floor.

AUDIENCE: Another thing that I've seen people do is some kind of [INAUDIBLE] style thing. Where essentially they have [INAUDIBLE] or something, you might have created them. You can beat a challenge by giving one to the other player that you're fighting with. And then [INAUDIBLE].

PROFESSOR: So it's like the amount of energy you've got.

AUDIENCE: Yeah, it's like the amount of energy you've got. And also, if you discard them or give them to another player then it's the difference between these things are just gone and they circulate around.

PROFESSOR: [INAUDIBLE].

AUDIENCE: Yeah, so if there's the circulation thing than you can get whooped a few times. But after being whooped then suddenly you get a chance to whoop back. And then it becomes less [INAUDIBLE].

PROFESSOR: That was interesting. This is the good part that I want to talk about which is [INAUDIBLE]. A topic that you guys are already very familiar with. But, at what point do your game mechanics-- are you designing your game mechanics not necessarily to enhance the realism or to encourage certain behaviors or to give the player enough information about what they're allowed to do or what they should be doing? And you're just going into the realm of how do I make this competitively interesting?

Real fights, if you get a bunch of blows, you do not get stronger. Well, if you're Bruce [? Bannon ?] maybe. But from a competitive point of view, or from a traditional game play point of view, that sounds like a great idea. That gets you back into the game, whereas any very realistic fight mechanic is really probably going to be a positive feedback mechanic. You win, you keep winning.

You can think of these five different things as--its not like game balance, but these are decisions that you have to make either as an individual designer or as a team about what any given mechanic in your game is trying to accomplish. It's rarely mutually exclusive. It's usually trying to involve multiple one of these things.

You don't want to fall down on any of these, especially not feasibility. It's like, yes this is the perfect game mechanic! And we had two years to be able to put together all the things that we had.

And for the games that have failed to run because of that idea. Especially live-action games that have a hidden computer component, especially if they're designed by MIT students, rapidly designed into a software engineering project that never finishes.

The game kind of disappears and it's all about this damn website that would have solved everything else. It's completely realistic because of the hacking mechanic that actually happens on the computer. And the skills scale to your ability as a character which the computer already knows, and you don't have to remember, so you can feel really neat.

And it's competitive because you know what the opponents are doing, but not everything they're doing, and it's going to take us five years to write this code. The game's never going to happen.

Let's see, let me think about an example just to sort of put some ideas in your head. Back to the idea of things that players might be uncomfortable doing with each other. Seduction is one of those things that's-- if you don't have a game mechanic for it, it never happens in the way that you want it to that helps the game. If it happens, it's happening between the players and that causes all kinds of problems.

So you come up with a rule, come up with a game mechanic, that feels nothing like real-life seduction. We're going to play a game of blackjack now, if I win you're now in love with me. And it's like, that's not how seduction actually works, but it actually makes it easier for players to say, I can do that. I can play a game of blackjack. There's no social awkwardness in playing a game of blackjack.

AUDIENCE: You can associate that with, I win this game so I slipped inside your glass a love potion so now you're in love with me. Something like that.

PROFESSOR: But see, in that particular case you're describing an action that people might be more actually willing to do through some sort of simple mechanic. Like OK, instead of love potion we're going to mechanic that enables you to something. I'm going to actually give you a file. And if you drink something in the tea, like maple syrup, talk to the GM. Because you probably just drank some magic potion.

But if the goal is, all right we're playing a film noire game. And you're supposed to be engaging in constant witty banter, laden with sexual innuendo, a lot of people have a lot of difficulty with that. Sometimes it works. I made it work in some games.

But it makes it a lot easier if the success or failure in that is not going to be bottlenecked by whether the players feel comfortable doing it. So creating a game mechanic that actually feels a little bit less than what activity you're trying to represent may make it easier for people to engage in the activity.

Same thing goes in combat, playing rock, paper, scissors, feels nothing like an actual fight. But people will be much more willing to play rock, paper, scissors with each other than to punch each other. So come up a rule, give them a little plastic gun, give them something to make it easier, and they'll be willing to engage in that activity more often. Violence in the rule will probably be the thing that comes up a lot in this setting.

So, let me see what else we can get into. It's about 2 o'clock. How many folks here have played some variant of *Mafia* or *Werewolf* or? Who's played *Mafia* in particular? OK, who's played *Werewolf*?

So those are live-action games too. And those are live-action games that specifically don't try to draw too sharp a division between who you are and who your player is. You are given a role, a card, that basically says whether you're Mafia or whether you're a villager I think.

AUDIENCE: Civilian.

PROFESSOR: And the whole idea is that everybody who's-- that's a character sheet that gives you private, secret, information about the role that you're supposed to play. But in my opinion, these particular games-- and we're going to play some variants of them-- what you are told by the cards is only what you're allowed to do. What actually gives you the role is what you decide to do.

I play Mafia and I'm going to say, Patrick needs to die. And other people in the room agree with me, and Patrick's character gets taken out of the game. That decision is the decision that made me Mafia. And that decision is the decision that other people are trying to catch, because they are trying to find a person who's actually responsible for various acts when everybody's eyes are closed.

The general model for these games is there are cycles. For *Werewolf* it's a day and night cycle, and for *Mafia* it's also day and night. But the idea is that during the night everybody who's not Mafia gets to have their eyes open. Everybody who is Mafia-- everybody who's not Mafia keeps their eyes closed. Everyone who is Mafia keeps their eyes open.

And people who are Mafia can communicate through some GM mediator, some game master mediated way, to specify the player to be taken out of the game at this point. It's usually a point. I see things with blinks. Because as the GM moves around sometimes that gives you clues, because you can hear. Even with your eyes closed you can hear where the GM is.

And then that's like the night cycle. And during the day cycle everyone opens their eyes and whoever's been taken out of the game informs you. And everyone knows and everybody starts discussing and accusing each other of being responsible for it. And the whole point of the game is for the villagers to identify who all the Mafia is before everyone finishes.

It's a live-action game that doesn't have a lot of action. I would say, it's one action. There's closing your eyes, opening your eyes, and there's pointing. There are variants where sometimes there is a Godfather.

AUDIENCE: I've seen websites with whole lists of different roles that are just ridiculous. Like there's grave keeper, there's necromancers.

PROFESSOR: There's people who can bring characters back from the dead. There are people who can basically do a background check. I think that's--

AUDIENCE: Oh, that's right you told us.

PROFESSOR: -- angels and cops. And you go from two cycles to three cycles per round. Four cycles per round where different people have their eyes open. And you get different bits of information about what the world state is like.

The fact that killing somebody is pointing at them, that's a dissociation mechanic right? It's not like you're actually being asked to engage in physical combat. Even though the fiction of the game is that you're assassinating this person in the middle of the night.

The verisimilitude, and competition, will largely come down to the discussion phase. They are trying to put players in an environment where you've got a paranoid of villagers, a paranoid town, and they're all mutually accusing each other. And both the act of trying to not be accused, and trying to deduce who is the right person to accuse, is a compelling competitive experience.

That's what all these games are really about. So all the emphasis, all the time of the game frankly, is devoted to that phase when everyone sits down and discusses with each other who could be the Mafia. You want to walk us through one of the variants maybe?

GUEST SPEAKER: Yeah, do you want to actually play it? Or just describe it?

PROFESSOR: We have 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14. We could have two groups or one big group.

GUEST SPEAKER: One big group may take awhile.

PROFESSOR: Let's do two groups but how many different rule variants?

GUEST SPEAKER: I only found one that I thought was really interesting, although we can certainly-- even the Wikipedia page has a million variants.

AUDIENCE: The one I normally would play would be one where there's mafia and there's cops. There might be a medic.

AUDIENCE: Inspector, angel, and prostitute.

AUDIENCE: What's the prostitute do again?

AUDIENCE: If you sleep with the mafia they don't kill anybody. If you sleep with an inspector they get incorrect information. If you sleep with a nurse they don't heal.

PROFESSOR: This is it's very important to make sure you know what rules that you're playing with before the game starts. So walk us through the roles, and then what we'll do is we'll break this into two groups. And we'll have two groups play separately and that's probably the end of the class activity.

GUEST SPEAKER: I had found a variant called Thing, which is based on the John Carpenter movie. Which is interesting because it takes out one of the roles. The idea is one person is the shape shifting thing, and at night they infect someone else and that person becomes a thing as well. So they're not knocked out, out right.

And then during the day the group votes and decides on one person to test. And if they test a thing that person is killed and they get to test another one. And the idea is that the things are trying to outnumber the people. Which is interesting because it takes away that inspector role.

AUDIENCE: Do you know who gets thinged in the middle of the night?

GUEST SPEAKER: So, I was thinking about this. What you would need is for the person who is the thing to indicate to the moderator. And then maybe the moderator could tap them or something.

AUDIENCE: Ok, so if you're a thing you know you're a thing.

GUEST SPEAKER: Yeah. The things are spreading as opposed to just--

AUDIENCE: And then if there's two things, do they both just agree on another? On a third?

GUEST SPEAKER: Presumably. So this is really interesting because apparently this is played at a conference for science fiction writers. So there's little snippets of it on the web about the rules from different blogs and stuff. And it's not as interesting, but of course the problem is how do you Google for mafia thing? It's not interesting to me, and then it seems like there's [INAUDIBLE].

PROFESSOR: So it might be fine actually to have two groups figure out how to play that game just from the description that you've just been given. I think [INAUDIBLE] there's going to be enough people who've played traditional Mafia to know how it works. And then we'll just reconvene at the end of it and see what each version people came up with. What were the similarities and what were the differences.

Again, that's the flexibility of doing a live-action game when the people who are actually coming up the the rules are actually in the same room as the players, or are the players themselves. You get to make stuff up on the fly as long as everyone agrees. So let's give it a shot.

While Jason is sorting out, any questions about the stuff?

AUDIENCE: The two biggest challenges that I've come across in the block mechanics have to do with surgical challenges and intellectual skill. So let's go intellectual. It's easy to play a character that's stupider than you. It's really hard to play a character that's smarter than you. In particular, it's really hard to play a character that's smarter than you if you don't have a GM around all the time to tell you, stop. So, if you have any ideas about how to deal with that.

The other one is, I'm creating social conflicts. Like, this is harder than any role-playing game because it feels like if you want to be able to persuade a character or something you just want to persuade them because you're role-playing right? But you're supposed to be playing a character who is more persuasive than you. But it feels really cheap. If you can just sort of.

PROFESSOR: You believe me now!

AUDIENCE: It also ties into another area that frequently pops up in LARP's and role-playing games in general which is use of metagame knowledge. So frequently if you've been persuaded to do something then you've come across players using their metagame knowledge that they don't want to do the thing that they're being mechanically forced to do.

And they're trying to find loopholes constantly. I don't know if you can really force people to abandon their metagame knowledge mechanically? But I don't know.

PROFESSOR: I have some examples on how the *Assassin's Guild* in particular has dealt with that. And in some ways it's cheating, because we're not going to try to do some of those things. In particular, let's take persuasion for one of those things. The problem with persuasion is that whatever mechanic you come to, other than what you see is what you get-- [INAUDIBLE]-- any other mechanic that you come up with runs that risk of the, wait a minute this is not what I really, really, want to do.

So the *Assassin's Guild* has replaced that with brainwashing. Which is the whole idea of, you're not being persuaded. You goals are being forcibly changed, but now you have other goals. And that's the big difference. Your old goals are no longer your win conditions. Your new goals are now your win conditions. You can still win the game by obeying your new goals.

AUDIENCE: That's cool.

PROFESSOR: The brainwashing mechanism.

AUDIENCE: So you've aligned the interests of the player with the interest of the character.

PROFESSOR: You want to go with your new goals now because-- how this came up, typically in the *Assassin's Guild*, the *Assassin's Guild* actually grew out from circle of death games. Which is, getting to know you. I have the name of somebody, and I need to shoot them with this water gun.

Who is this person again? I don't know. I'm a freshman. I haven't met everyone on campus. I'm going to figure out who this person is. That's where those games came from. The *Assassin's Guild* kind of grew up from that. Then it became teams. And brainwashing was basically the set of game mechanics that was used for recruiting people to your team.

So it's like, all right everyone's got one target. But there are a few people out there who's job is destroying everybody on this opposing faction. And there's only one person in that opposing faction right now. There's only one of me. But I have this brainwashing mechanic that recruits more and more people. So what you thought was one, I'm just against another individual, becomes my group is against that group.

And it feels pretty awesome, actually. Because what it actually feels-- it's a weird game mechanic way of making your character have some sort of development in the game. If you think about a role-playing game, character development means your goals now change somehow. But it's really difficult to give players a means of doing that themselves.

Brainwashing was one of the few ways that seems to actually have worked. I'm actively going to knock out this character, put this blinky helmet on them for five seconds, and if nobody catches me in this process I give them new goals. And the person who's [INAUDIBLE], dude this is way more exciting than anything [INAUDIBLE].

And you also avoid the metagame problem of loyalty. It's like, I got this information from this other group but I've been brainwashed and I don't want to tell you. It's like, no you want to tell me now because it'll actually help you win. But metagaming in all kinds of live-action games is a big thing. You know things about the player or you know things about the game state that you're not really supposed to know.

If a person is supposed to be able to teleport from one end of campus to the other end of campus, the character may be able to do that. But the damn player's got to walk all the way in between. And you have to drive the player halfway to the, I now know that player is probably on this side of campus. Even though your character really had no idea how to deal with that.

That's just one of those-- there are ways to design game mechanics to avoid those situations. But in many, many, live-action role playing there is a honor system that really has to kick in. The nice thing about it is that if everyone decides to go by the honor system, and agrees that this honor system is necessary for the world to be reinforced, it actually helps reinforce that mutual illusion that this world is real.

By saying, I know that I'm not supposed to know those things. But I am going to play this game as hard as I can in a way that's [INAUDIBLE]. Actually reinforces the world for everybody else. It's the same for improv theatre. Anyone here involved in improv theatre or improv comedy? So, you know yes, and?

AUDIENCE: Sure.

PROFESSOR: What would be the concept behind that?

AUDIENCE: Yes, and, is an idea where if you give someone an offer they'll take your offer. So if I say, man we're all out of tomatoes. Someone will say, yes and the big tomato cook-off is tomorrow or something like this.

PROFESSOR: You cannot contradict what was said.

AUDIENCE: Not only do you not contradict, you always add information. Every line, at least at the beginning of the scene, should be adding information to the scene. And then after a few lines you have a very, very, elaborate set up that's kind of ridiculous.

PROFESSOR: But, mutually shared?

AUDIENCE: Exactly.

PROFESSOR: So, in that same situation. Metagaming is one of those things that's actively working to destroy the reality of your world. And if all the players agree to try their damn hardest to not let it interfere with the world [INAUDIBLE]. The illusion in a way that it strengthens the scene for improv theatre.

PROFESSOR: Hold on, just one sec, the other concern that you had before persuasion issue which was?

AUDIENCE: Characters who, in particular this comes up a lot in this [INAUDIBLE] type situations or what have you, where you have somebody's who either a super genius.

AUDIENCE: Oh, so someone who's better than you at something.

AUDIENCE: Much better than you. How do you mechanic that?

PROFESSOR: The best way that you can do that is to cast the right person. But what I have generally found is that old role-playing game chestnut of separating intelligence from wisdom makes it a little bit easier. There's intelligence, which is the ability to think on the feet, and there's wisdom which is how much you know about the world.

And you as the game master designing a game can figure out, when I say someone's really smart, what do I mean? Intelligence or wisdom? It helps you a little bit on thinking how I can use game mechanics or game writing to fix that problem.

So if it's intelligence it's just like, oh I have the ability to do stuff that other people can't do because I'm so smart. And you can literally just give them abilities to act on things that other people do not have. I'm able to build a telephone out of this Coke because I'm a professor of *Gilligan's Island.*

I'm smart. It doesn't mean I have to act terribly smart. I'm capable of doing things that other people can't because I've been told specifically I have these abilities. But that's the intelligence side of it.

The wisdom side of it is a little bit harder. Which is basically, you dump a whole bunch of information on somebody. And you hope that they are capable of making associations between what's happening in game and what they read. That's a lot harder. It is a problem, but I find that by separating those two it makes it an easier problem. Patrick?

AUDIENCE: Yeah, this is a bit of a noobish question. Are LARPs usually played in real time?

PROFESSOR: Typically, they have rules about when to hit the pause button. Basically at MIT those are usually enacted when safety becomes an issue. People are running too fast. Somebody just fell down and you want to be able to stop everyone from running, and so they shout halt. Typically they're happening in real time because it's really hard to do turn based stuff that doesn't quickly feel like a board game.

AUDIENCE: I mean like, when you say someone would want to do a background check and you'd say I don't know, come back in two hours. You'd literally wait two hours?

PROFESSOR: So, yeah, often that really means just two hours. And that's an interesting thing of that it's real time but it's kind of a time delay at the same time. So as a game master you can build in game mechanics that take advantage of real time delays to be able to give you as game master some time to breathe.

Typically they're happening in real time. I wrote a game where the clock stopped somewhere between midnight and 8:00 AM. The game world literally froze, well not literally figuratively froze, as well. And one minute after 8:00 the clock would practically, in game terms, have moved one minute even though there were eight intervening hours in between so that people could go and take a break.

Which would be great for an*Army of Darkness* type of scenario. [INAUDIBLE]. But those three films as opposed to it all happened within 48 hours. So Andrew? [INAUDIBLE].

AUDIENCE: So I guess two things, one is in terms of wisdom. Could you possibly have little note cards that are flipped over everywhere? And then the wisdom person, the person with high wisdom, could read about information in there?

PROFESSOR: You could certainly have taken advantage of a piece of paper taped on the wall just put in the back, right? Some people can arguably be able to read off the back of the paper, some people aren't. Which will be a little bit easier than trying to keep it all in your head at once.

You can also give very limited wisdom, like the whole psychic example, right? I am sensitive in some way. I can tell when certain things are cursed. By giving them clues on printed pieces of paper that nobody else knows how to interpret.

I see there is a number associated with each one of these rooms. That number happens to be even. This is not a place that any sane person would want to be. And there are people who have the wisdom to tell that and there are some people who don't.

That's another way to put those environmental clues. Particularly in MIT, hiding clues in plain sight, and every single way that you can possibly do that, is really exploited. So the numbers for instance. I've seen games where everyone has five digits on their badge. And every single one of those digits means something. If you happen to have the ability to interpret them, but each one of the digits means something different. So that's an example.

AUDIENCE: And just really quickly. In terms of space, how much space do *Assassin's Guild* games take?

PROFESSOR: MIT *Assassin's Guild* has the advantage of the MIT campus. So it can go anywhere from main campus mounted by Mass Ave. and Main Street, to all over campus. But players hate that. Players hate walking all over campus. It kills their feet.

So often it just turns out to be the few rooms that they could get room reservations for, the MIT campus activities complex, and the sort of general vicinity around there. Outdoors is really not used much, because MIT *Assassin's Guild* loves shooting little plastic things at each other. And when the wind blows that just sucks. Jeremy?

AUDIENCE: Do those eight story [INAUDIBLE] games that have gone way horribly, fallen apart.

PROFESSOR: Oh, absolutely. How much time have we got?

AUDIENCE: Can you highlight what are the mistakes that have made-- everyone who's doing these, especially on my team, they're all smart people. And they're written by smart people. So what hazard mistakes do smart people still make that results in these games falling apart? Or bad things happen?

PROFESSOR: Well, the most common thing that happens is not even an issue of how smart the game writers were but how much experience they've had in seeing things go horribly wrong.

AUDIENCE: Right, which is why I'm asking.

PROFESSOR: Just like this class has given you experience making games, you've seen how some projects can go wrong. A lot of it is just system dynamics, right? I put together a bunch of rules. I didn't expect those rules to interact in that way. But because a live-action game is difficult to run multiple times, the first time you see--

AUDIENCE: How do you play a live-action game that lasts to a month?

PROFESSOR: That actually came up in the forums I believe. Somebody was asking about this. You can at best to a test--

AUDIENCE: Give them mechanics?

PROFESSOR: --You can play the sort of game mechanics. Write down the stripped down version which takes out all of the plot motivations and just has the combat. This is how combat plays. I did that for a Matrix game once. And it's like, I'm writing a game of a Matrix. Combat is really freaking important.

So I just made an entire game where all it was, you want to go in and get this thing and get out. That was the whole rule. And here's your three pages of contact notes. And people were like holy shit, this is a lot to remember. And that showed me the problems that I had. Unfortunately, it wasn't so catastrophic that I would use it as a catastrophic game example.

AUDIENCE: Tell us about a catastrophic.

PROFESSOR: Catastrophic game examples. OK.

AUDIENCE: Tell us someone tripped and hurt themselves. [INAUDIBLE].

PROFESSOR: No, that's not what you're looking for I understand. It was a game where everyone was playing undead. I think they were vampires. So they could get knocked down if they got shot, and they would get up again in five minutes because they were immortal. Unless they got staked or something they would get up again.

Unfortunately, there were a lot of vampires in the game. Often many of them were in different factions. So they were going after each other with guns. So when two people who were obviously against each other shot each other, fell over, they would get up in five minutes and shoot each other again.

Repeatedly begging for someone to show up and do something to break this deadlock. And that's one of those things where it's like game mechanically you know what's supposed to happen, and it sucks. So that's one example.

AUDIENCE: Do we have to wait five minutes? Can we just continue to shoot each other?

PROFESSOR: But the issue is, again, these games are happening in real time. So the five minute rule is there possibly for a reason. While you are down for five minutes those five minutes become very valuable for someone who wants you down for those five minutes.

You can kill me. I can kill you. But both of us can knock each other down for five minutes. And that's a great delaying tactic. And I can send one of my friends and do something that I don't want you interfering with. And if that's the case then that's great. But often it was just, oh crap there's no way to break the deadlock.

AUDIENCE: You'd figure the limiting factor would be ammunition though.

PROFESSOR: I think that game actually let you pick up your ammunition all you want. Because it can be a really annoying limitation to run out of ammunition. Especially if you are playing with the little rubber dart guns because carrying a whole pile of them is really annoying. So if the rule is, I get to pick them up, then you have the allusion of having a lot of ammunition without having to carry a lot of ammunition.

So that's one example of a catastrophic failure. There's a really funny quote regarding brainwashing actually, which is where were you? I was not being brainwashed. Who were you with? Not with the people who were brainwashing me.

Back to the problem with the persuasion, right? It's like, I want to tell you something because my goals haven't changed far enough to want to align me to my new goals. So I'm going to do everything that I can without breaking the rules. I'm not allowed to tell you that I was being brainwashed. So I can say that I wasn't being brainwashed.

Other catastrophic? How long do you think the thing will take probably?

GUEST SPEAKER: I don't know. Probably about as long as a game of Mafia.

PROFESSOR: OK, so like half an hour?

GUEST SPEAKER: Depends on the people.

AUDIENCE: If you put a time limit on discussions then, because I've played in the past where it's lasted hours. Because there's no cap and people just went into these long discussions in between rounds. So if you put a cap like OK, it's going to be this long a discussion and then we're going to kill someone off.

PROFESSOR: Let's see, I had wanted to read.

AUDIENCE: Played online *Mafia?* It's a totally different experience.

PROFESSOR: Chat involved or something?

AUDIENCE: Forums usually. So basically, when you can look at the history of what people have said and who they've accused and what order they did it in, it completely changes how Mafia turns out, right? Because all of a sudden, people start going, back in the history and compiling statistics [INAUDIBLE]. And who said what and then who must be on their side if that's the case.

But there's this kind of meta knowledge that you can use with this if you are Mafia because you can tell [INAUDIBLE]. We were able to communicate at the Mafia privately. That meant we could for instance do things like, make sure we were never the first people to accuse anyone.

So that's a Mafia truth, never do that. Because it immediately makes you look suspicious later on if somebody turns out to be the Mafia. There's no way that you can be the first person who accuses. But bandwagoning somebody who's not in the Mafia is always great. So you can coordinate to do the sort of thing to try and defeat the statistical analysis that somebody else is doing.

PROFESSOR: You've got this whole shadow governance theory.

AUDIENCE: That's a great [INAUDIBLE] tactic to try and get you away from my team is to actually accuse someone on your team. And hope that they don't actually vote them off. I've definitely been in a game where we purposely killed off one of the people on our team just so that we wouldn't be accused. Oh, he cannot be on Mafia because he killed off a Mafia. OK, and then we end up winning because no one figured that out.

PROFESSOR: I mean, that's one of the best things about all kinds of live-action games is that it almost encourages people to look for these slightly out of the box illusions. These sort of emergent I'm not really going to expect that but it still fits within the rules. Because we are dealing with real people for the most part and you're not limited to the cards you're allowed to play or the turns you're allowed to take. So taking advantage of that.

I have one more disaster story.

AUDIENCE: I want to hear it.

PROFESSOR: I'll limit it to just one for the people who don't. This was a game where there was a virus that was spreading. People who are in *Assassin's Guild* might have already heard this one. The whole basic idea is that there was a explosive nano-virus. People who got infected after a certain amount of time would explode and anybody in the room with them would now be infected.

Of course this was a game-- a game set in science fiction kind of thing-- and we've got doctors who are capable. Who have mechanics to be able to research cures. However when the doctor happened to be one of the first people to die, what rapidly happens is that what should have been a one night game turned out to be a one hour game and everybody exploded.

I guess that might come down to feasibility. But you can think about it as you need a certain amount of redundancy when you're designing any game, but particularly live-actions games. Because shit happens. And you've got to expect that to happen. There's always this fear about, oh I put in too many resources into this game and the players are going to find it too easy. And more often than not, yeah, there's some players that that are going to say we breezed through that.

But, rarely do people get terribly upset in a live-action game when something is really too easy. They get really upset when it comes to the end and it seems to be impossible. Oh, so the GMs only made it possible for one person to fix this problem? And they didn't think about that person just dying in the beginning of the game?

So that was another example. That [INAUDIBLE], I'm sorry. I feel really bad about bringing up examples from my games, but I don't know which ones are the ones that I genuinely--

Oh, I do have one more. So, this was after*The Sims* came out. And people should really be worried about that. I thought having a bladder stat would be a really good idea for a game.

This was a game that was set in a train that was steam pumped. So tea was the game. Tea was in fact the combat drug. If you drank tea, your combat status would increase but so would your bladder stat. Once your bladder stat was passed a certain point all your combat stats went down and you really had to go to the restroom.

Which was really interesting, most people just reviled that game. Because there was one more number they had to hit that was stupid annoying and really didn't do terribly much for the immersion of the game. I was thinking, it's a game about travelling on the train. So you use the restroom all the time. That's the only thing I do when I'm travelling. I use the restroom. [INAUDIBLE].

But that led to some interesting emergent situations. Because when this train gets attacked, and everybody needs to find a safe place to hide, what they all do is they head into the washroom, barricade it, and drink tea until all their combat stats go out the roof and then win the fight. Because they were right there in the restroom they could afford to do that. It was hilarious.

AUDIENCE: Some of these people come up with exploits.

PROFESSOR: They may hate the rules, but once they understand how the systems work they're going to come up with ways to use it to their advantage. And that can be some of the most enjoyable moments.

AUDIENCE: I saw a squirrel this past weekend, and he figured out if he stood under a bird feeding thing up in the tree it could just get free food because when the birds ate it once every two to three minutes they would drop a grain inevitably. And there was this really fat squirrel just sitting there. He spent the entire day sitting right [INAUDIBLE]. So it's like it's so natural to try and find exploits of everything and work it to your advantage.

PROFESSOR: There is a moral--

AUDIENCE: It doesn't work for [INAUDIBLE] but you still do it anyway.

PROFESSOR: There is a moral to that. Is that the live-action games, especially if you're playing in the live-action game community, there is whatever you write down as a rule we put it up on the wall and they put it on a piece of paper. Someone's going to try to do it.

And you have to think of, I'm going to put in a rule that's so ridiculous that people are not going to want to try and do it because it's going to hurt them or something. Like jump on this spot 100 times and you will unlock this door. Or you could find someone with lock picking, and you'll just assume that person's going to find someone with lock picking. No, someone's going to jump on the spot 100 times and they're going to hate you for it because you put the rule in there.

So try not to hurt your players, would be the moral, because they will do what you tell them to do.

AUDIENCE: Do you guys sign disclosure forms?

PROFESSOR: All right, that's a [INAUDIBLE].

GUEST SPEAKER: Before we go, I want to just clarify this version of the investigation mechanic. So, the group of scientists gets to test two people. If you catch the thing then they're dead and out. If you catch them on the second time-- this is what I've read-- if you catch them on second guess you get another guess. I'm not sure if that means you can have infinite guesses or not. So that's something to play around with.

AUDIENCE: If you test the wrong person who's not the thing they don't die?

GUEST SPEAKER: No.

AUDIENCE: So I test someone the first time, they're the thing, then they're out. But I test someone the second time, regardless of whether or not I tested a thing the first time.

GUEST SPEAKER: Yes. So you always get at least two guesses.

AUDIENCE: But if you test someone on the second one they don't die?

GUEST SPEAKER: If they're the thing they're dead.

AUDIENCE: The thing dies. If you test someone on the first time and they're the thing you don't get an extra guess?

AUDIENCE: Well, not necessarily.

GUEST SPEAKER: You get two.

AUDIENCE: You always get two.

AUDIENCE: So if you guess any time [INAUDIBLE] but if you guess a thing and then not a thing you get a player.

AUDIENCE: I think you can catch the thing really quickly.

AUDIENCE: I think you can catch the thing without actually doing anything sort of like making a system where you automatically catch the thing. You're getting two guesses so in the ratio of randomly guessing you'll--

GUEST SPEAKER: And you can certainly change it right? This is just what I've found. And it seemed like an interesting thing, the whole point of the part was.

AUDIENCE: Which thing do you start with?

AUDIENCE: No, you're not [INAUDIBLE]. Because as I recall you would infect someone first.

AUDIENCE: Because you're going to have two unprescribed.

AUDIENCE: This seems really like biased towards non-infected.

AUDIENCE: Well we'll find out.