

How Story Works

Charlie Hepton 06:09:55

Thank you, everyone who came yesterday for joining again, to everyone who arrived today. Welcome. Thank you for joining the first ever connections next generation conference. Just to give you a quick run through of the day.

We've got how story works by Sally Davies, who can see on the camera here and then we're having a 15 minute break followed by a game design 101 which will be led by Tom Fisher and Rex Brown. And then you'll have your game 101 challenge. So design challenge. We'll be putting up the invite link to the in the chat. So if you haven't yet, please sign up. And then we'll do we'll have a 30 minute break during which you can rest after all that mental exhaustion and then do a game showcase followed by a presentation on on a hybrid Wargaming by adder and then we'll move into networking.

So just to get started for those of you who weren't here yesterday, Sally Davis is going to talk about story. Sorry, story writing and how that influenced that. She's a senior analyst at the Defense Science and Tech laboratory, aka DSTL part of the UK Ministry of Defense antivirus software in support of analysis, simulation and Wargaming. So that definitely the person perfect person for this job. And she's also got an interest in diversity and inclusion. She's an editor at pack Sims and co author of the Dobby house principles and really works hard to include diversity and equality in professional Wargaming and everything to do with serious gaming in general. So over to you, Sally. Awesome. I will probably have to stop sharing my video because my bandwidth is a bit rubbish.

Sally Davis 06:12:02

So I will do that now. I'll put a link in the chat to the sides if you need a copy to follow along at home. And it'll be a transcript afterwards for accessibility reasons. So once upon a time in Wargaming slash Serious Gaming. This is all about narrative and gain, what it is, how it works and how to make it work for your game.

What about such things I've been Writer in Residence AI theater. I was long listed for the BBC drama writers room I've had plays on I've worked on commercial, interactive audio drama stuff. I'm going to be your tour guide on this to be dashed through the London Tiv. And pretty much I'm just going to point out a whole bunch of landmarks for you to go and explore in slower time. And there'll be all sorts of links in the slides for you to do.

So. Why does story matter? Story is and it's what makes information compelling. Brenda Romero has this fantastic story about a game she made about the Middle Passage. So her daughter came home from school and she said what did you learn at school today? And her daughter's like, well, the slaves get picked up in Africa. And they sign across the Atlantic and they farm cotton and sugar and tobacco in America and I could send to Britain and then Lincoln freed the slaves. After after. Poof I gave them the so Ramirez like wow, that's not really the same information but already understanding it so gives her a handful of meatballs and says

paint me some families and adults adult spends about 20 minutes making the blue family and the green town near the red family. And Romero takes index card and that's going to be the slave ship and she just starts grabbing people's and putting them on an adult site. You forgot the dad. No, that's not coming. The children know the children are coming but they want to know this passage. Nobody wants to go and like she's You mean I could have come out in the forest and found you gone or fell down gone or or my brother gone.

But we'd meet when we got to the other side of the Atlantic and river it's like well, no, probably not. So that happened. So this idea of being taken as a slave is meaningful. And now it's time to sail across the Atlantic. So America we have this much food. It takes the chance to cross the ocean. We're gonna roll the dice for how much each day and the head was running really really high at about halfway through. She thinks we're not going to make it what we do. And remember he says well, you could hope that Euro lower and just try and tough it out or you could let them eat less food or you could put some people overboard and this has become a really horrible choice for her daughter because these Maples have meaning now, like she starts to understand how awful slavery was. He wasn't just a cruise liner to eventually emancipation.

And it all happened because she spent 20 minutes making families like investing in all these little relationships. meeples don't matter but mummy and daddy little baby nipple that matters. So story changes drive information, like reading a textbook into an experience and experienced teachers and empathy is the superpower of war gamers and Wargaming and games so will it matter? Well, all communication is storytelling.

Analysis is storytelling with data. In some kinds of games, storytelling is the game so RPGs or influence or games. And in other games, it's kind of set dressing around the game, and it's expectrum but I don't think even abstract games are outside story because ultimately human beings are playing and the nature of players that we invest ourselves in in the pieces. So the way the story works is the way that game design works and it's all sort of adventuring into the dark set by dangerous hoping to emerge triumphant. So we're going to talk about what story is, what happens in a story and why that's important. How interactive stories are the same and different and how collaborative storytelling changes things and how to balance player agency with a coherent story. And then how the process and product are kind of the same.

So what is a story? A story is how the things that happen affect someone in pursuit of a difficult goal, and how that person changes internally as a result. And there's an awful lot to unpack here. So we've got this internal story, how the person changes, and we have an external story, the things that happen, and that bits the plot. And a plot is not just a sequence of small fires. It's how in trying to put out a seeming real minor blind Blaze, the protagonist fences slammed into an iPhone.

So this touches on another big thing, cause and effect. So we're going to talk about that a lot more later. But what comes before has no matter what comes after we've got someone the protagonist or the hero, and story is one big act of empathy walking a mile in the protagonist shoes, look through their eyes, feeling through their perspective. Story games are the same. So

you become the protagonist to a story. And in a game you also act for on behalf of the protagonist to some degree, but the action is what makes you become the protagonist.

So they have a goal, and it's not easy. There's doubt and it might only be willing suspension of disbelief, because we all know the story is gonna end happily in the end. But story throws on that worry what if they don't make it? And in life we show them that kind of thing. But we go to stories for that as a dress rehearsal for what if this terrible thing happened to us? How we cope? Would we cope? What would we do?

And this change, so they have this goal because they don't have it yet. And to try to get that goal they're going to have to change or grow. Or if it's a tragedy, they will fail to achieve.

So we're going to unpack all of those things. Dramatic action your presenter has to watch. I just super love this comic. It's the best illustration how much investment you can get out of a really quickly. So, you have to want something concrete, not abstract. So something that you can photograph than achieving something physical that embodies more abstract concept like world peace or whatever. And it has to be something where at the end of the story, you can answer they get it with a yes or no answer. And all your characters have to want something. Even if it's just a glass of water. We have to believe that they can get it or believe they can get it so We'll root for something completely impossible if we believe that hope will root for people to exceed their own expectations if we think they're impossible is possible. And your characters have to take action in pursuit of that work. So it's not enough that they buy a lottery ticket and wait for the results. They have to actively pursue their wants. And action isn't dramatic unless it ticks all those all three of those boxes. So it's just no no nothing will happen even though characters. So from our story before, how the thing how the things that happen affects someone in pursuit of a difficult goal. So this is all about the ones.

Conflict is like this is the most important slide that you'll see today. Without conflict, it's just other boring and it doesn't interest people. So your characters each wants to take action. There won't be a mutually exclusive exit conflict. So characters can get what they want or can't get what they want, or they can't both get what they want. And if they can both get what they want. They both want the same thing. That's not conflict. Conflict isn't an argument, although it can involve an argument. Argument without conflict is just shouting or just people violently agreeing with each other. So conflict can be direct. So character a what's a glass of water? Going to be?

A muscle and there's only one rattled. So he drinks it. There'll be nothing for each drink. If he drinks it, there'll be nothing to eat or drink. So they're fighting for control of the same thing. And if they can't, or they won't share, that's complex, but it can also be indirect. So maybe he wants to bottle water because a thirsty, B isn't thirsty at all. They just don't want to have the water. So the water itself isn't important to be it's just stopping me from getting my PCB hasn't got to be where they want it to be. So maybe he wants a slightest bit of interest in the water. But he wants to kiss a and b can't kiss a if a is drinking the water and he can't drink the water if B is trying to kiss so conflict is in the definition of we have how things happen.

difficult goal so conflict is what's making it difficult.

I we go to stories for address your house person love this difficult and conflict like how do I overcome that obstacle? So the action of your story is over when one of the characters insensitively gospel no got no want. So someone's drunk the water or the water spilled on the floor or they're not thirsty anymore. Something has changed so that they will want or can't have that one tell you.

Sometimes this is called the obligatory act because it's the thing that has to happen after you set up the goal. So the monster starts eating people. The obligatory act is what somebody is going to have to face this monster and as soon as this one is achieved, there's no more dramatic action. This tension has gone from your story and actually your story is over. Sorry, finishes without there having been an event then.

But this story isn't over. Or you've never had a dramatic one, or the dramatic one is still ongoing and you haven't resolved it yet. The you the event of the story, you might get what you want. You might not get what you want. You might change what you want, but you have to have answers that central did they get it or didn't they get it? You might get something else instead or as well.

So in our definition of story we have how things that happen all in pursuit of a difficult goal and how that person changes internally as a result. So this event is not change. If the situation is the same at the beginning and the end of the story. There's been no change. If like there's either no dramatic action or the dramatic action is still ongoing.

So that the changing so of your story, winning should mean happiness, sadness, whatever it is that make them happy. Losing should mean death in some way. So either physical death, or psychological or professional death in some way. And it doesn't have to be the end of the world. But it has to be the end of their world in some ways. It can be small in global terms, but it has to be really meaningful to the character.

So Surrey has an event there's a boss fight yet.

And stories are made up of all of these scenes. And each scene is its own little dramatic action with a smaller ones and a conflict in that event. And then they all chained together in this series of scenes that leads to our boss fight at the end. So indoors really wants to kill a shark, but on his way to killing the shark. He wants to close the beach and there's a scene where he needs to find the shark. And then there's a scene where he actually faces the shark. So chains together in this series of cause and effect.

So the way a scene works is the protagonist enters the scene. With a goal. So they want something concrete. They have a dramatic action. And that action asks the same question, will they get what they want? Yes or no? And it has to be a yes or no question. It could be really find out why X did something but it can't be Why did x do something?

So then there's conflict. Somebody wants something, somebody else wants something mutually exclusive to that. And there's an event which answers the same question. And there are four possible answers to this question. Yes, they get what they want. If I bet yeah, no, sorry. No, they don't get what they want. So they don't find the killer. That's a setback.

Yes, but so they get what they want, but they pay a price. They also get something else they didn't want so they find the killer but now they haven't gotten trained in their head. Finding the killer has been resolved but immediately replaced by a new goal of not getting shocked. Or the fourth option is no and furthermore, so they don't get what they want. And now they're in even more trouble. So the killer got away and also, Lucky's shooting at us. So finding the killer is unresolved and there's another problem to deal with on top. So as soon as you answer a scene question, yes, dramas over event if your scene just became the event as your story and story changes together a whole bunch of scenes, and every single one ends in some kind of setback until you get to the final scene in the boss fight where finally, you want to guess if you have a happy ending at the end of your story.

And the event of a scene is often called a disaster because story goes best things keep going wrong and keep getting harder for the protagonist. So in our definition of story we have how the things that happen affects all the adversity that were difficult goal. So it's that difficult goal. Things keep going worse, so they can't just succeed at first try we learn and grow from failures and setbacks.

And we're back to that line about how story is not how the protagonist puts out a series of small fires. It's how in trying to put out a seemingly minor buys. They fanned the flames into an iPhone. So the scene disaster causes the protagonist to make a decision so like, Okay, what do I do now? And they even need to find like, how are we going to get that same question after all, or they go off in a completely different direction of I need something else completely different. And so they make a decision. They choose a new goal and that becomes the goal of the next scene, and the next in question. And this decision is really important. So first of all, it's an act of changing the character. And in our definition of story we have that how the person changes entirely as a result. So this is where all that change is happening. It's also causing effect so if you write out bullet points of the key things that happen in your story, and the words and then fit between each of them. This isn't a story. It's a shopping list. You have to have the words therefore or but between all of your scenes, like the disaster causes the decision. It changes things and if they can have a do over so at the end of one scene, they can go back and start effectively the same scene again, nothing's changed.

The disaster wasn't big enough, or the change wasn't big enough, and nothing is really changing. So obviously, this is important. It's really interesting in game design, because, like game narratives, or games themselves are a series of decisions. What do you think about change in a story?

Is this the mirror or the remote is like the center point of story. And emotional hinge about which your character changes internally. So with that definition of story, how the things

happen, that happen effects on in pursuit of a difficult goal and person change as a result. So the mirror moment is a moment of reflection for the protagonist. They look at themselves, literally in the mirror or metaphorically, and the situation they're confronted with, and they asked what needs to change? Who have I become, or how will I get out of this? Shame arise from something or do something else. So it implies the character recognizing something flawed in themselves and their transformation to something better. So that's the internal change of your story, and the grace of your protagonist as a result of the actions in the story. So the event of your story, is that transformation being realized the stakes are happiness or death. So your character doesn't have happiness at the beginning with the story that's when.

And dramatic is pursuing something that represents happiness. So, if your story, obstacles preventing them reaching happiness, we know that conflict is mutually exclusive, dramatic action. So one way to think about the conflict of your story is in terms of the heart underpants. So the heart is the thing that your protagonist secretly needs to make them a better person. And the pants is everything based impulsive and self destructive. So the character's heart gives you the catharsis or the transformation. And their pants is all the it's all the ways they get into a reach rock bottom before looking in the mirror and being pushed to change or die.

And there's an even better definition of story. And that is the interior narrative. The protagonist is struggling with a deep seated desire so that they want the misbelief that's holding them back, which is their floor. So they want they have to give up the misbelief they have to transform, they have to change the exact middle of the story. Is when they look in the mirror and say like holy cow, that thing I never even questioned. That's wrong. What am I doing? Conflict of your story is these two mutually exclusive dramatic actions to achieve the deep seated desire and to hold on to that defining misbelief and like everybody has shaped your thought the back of the hand like that can't can't do it message that they have a reason we go to stories is to learn how to overcome our own misbeliefs by watching the protagonist trigger out for us. So the midpoint of the story is typically the worst possible thing that could happen. So either the character gets exactly what they want, and it turns out to be horrible. Or they fail in some huge way and they realize just the magnitude of the obstacles ahead of them.

And this thing is really simple. That brings the plot and why it's important your character and how to make the concrete things that the story matter. The internal story. So like killing aliens is fun. The plot of aliens shouldn't really matters, but the emotional arc of aliens is Ripley parenting new to make up for having sat through her real doses slice or in Black Panther. The emotional arc is embedded in the good Black Panther, Black Panther warring over the future Canada and there's an RPG great ranks and there's a link to it later in the presentation. Where it makes this the mechanic of the story that the RPG so the mechanic of the game is each character has this thing they hold most dear. And you can invoke it in the story to help you win dice rolls. But by doing that, you imperil it so you're constantly battling between surviving the fight in the battle by losing, lose the battle to protect the thing that you hold most dear. So, either way, there's going to be really profoundly meaningful change driving and driven by the plot.

So you've probably heard of things like three act structure, and the hero's journey. These are all analytical models that describe common features. So like there's a universal story. Story follows it to some degree, and the ways of looking at what makes up a story. So the parent moment is another one. There's 5x, or there's kishin and katsu, which is the traditional Japanese four act structure, or Dan Harmon circles or Vladimir Propp's, fairytale functions. And these are all different ways of describing the same thing. And some of them are more useful than others, some of them are full of icky patriarchy and colonialist stuff, and people have come up with more inclusive alternatives. And so like three extractors, but the beginning, middle and the end, and you just do stuff in the middle, you get to the end, which isn't really as helpful for understanding the function of things. As some of these other models. And all of them say that like there are these things that happened in the story, but what's important about them is not the plot points demand. It's not paint by numbers, making it a function of these parts, and the kind of drama and conflict and things that they enjoy. That's important. So interactive stories are the same.

So agency choices, they exchange, all of this stuff is important in the narrative. And also, it's the stuff of game design. So the player has to make choices. They have to be choices they can make they have to feel like the choices are meaningful to them. And those choices have to affect change within the game. And this is fully and you lose she's wanting to win. Yay. So making a game narrative shines a spotlight on what's important in just any narrative. And it's always easier to write a story when it's interactive, because you have to give the players choices, and they have to be good choices. So dramatic actions mutually exclusive things.

You can't give them the obvious correct answer and an obvious stupid answer because that's not their choice. That's a calculation and people are gonna get really annoyed with that illusion of choice when there's risk at all. This one is obviously better option. So if the choice A or B is not important, it's meaningless in terms of the story. It's the story equivalent of mashing anybody like to progress rather than having to mash the right buttons. At the right time. And cause and effect is really important. It's gonna matter that you choose x. And it's gonna matter for the next story point, but it also has to keep metrics throughout the story. So the story needs to have memory or feels weightless. So like JJ Abraham's films like that memory, though. It's super exciting, wild ride, but afterwards completely forgettable because a character can scream over the death of a loved one in one scene, and two scenes later, it's like that never happened.

So random thoughts about narrative games, even games that think of as interactive stories have narrative and follow narrative. Mario World 3d levels follow the future 10 katsu structure of idea development twist resolution. So go study Mario, it's really good.

Saying that computer games have a reputation for the word storytelling. If the gameplay is compelling, who cares about the story people will still play. So make sure that your gameplay is compelling, but also can imagine how good your game will be if you can also nail the story. So the player is the hero.

The narrative into the second person precedents for the player to invest in the protagonist. We watch a film or read a book and invest in finding this character without it having our name and our face on there in the video. So even when a game lacks a narrative, the act of playing is also investing. So we talked about my pieces over playing risk or chess or whatever.

So making the player's character invisible literally being the player.

And it might be the right option for your game. But don't feel that you have to go this way.

Because it's also really hard to give someone agency in a game when they're a completely blank slate.

So we're talking the mirror moment. So as you're leaving the player to bring absolutely everything to the character and putting all the internal change on the character.

It's super difficult to narrative around that without a tangible sort of transformation. That can be done, but it's really hard to be things like a murder mystery, where the motivations of the detectors are pretty assumable. But the best stories have an element of reflection of the story onto the player. So they will make some decisions about player character to give you that meaningful arc. So what I'm saying is, don't be afraid to do that people will play along. Like that's part of winning. The disbelief of the most tragic moments of a game or a story is when you do the thing that was supposed to be impossible. Be literally transcendent. When that happens. And history about games. So when you finally figure out that super difficult puzzle feels amazing. And it's also true narrative, which is something really interesting to unpack about drama and conflict and stakes. So setting up something desirable but conflict making it impossible or mutually exclusive, and then choice resulting in change that causes it to become possible. So players are opening up a crack in the universe, and something trivial becomes really meaningful. It used to be possible. So my favorite examples is often the McElroy brothers. So once from cowboys, which is a Let's Play series, where they smash up cars in a soft body physics simulation, and the game is still in beta while they're playing so more and more stuff becomes possible throughout their narrative.

And early on, they spend some time time trying to get the driver out of the school bus without causing sort of hilarious horrific things that happen in the simulation. The driver isn't really separate from the vehicle, so he bounces around in it but if you ever disconnecting from the vehicle, he in the bus kind of tightens it out in horrible ways. But then later on a new feature appears that allows you to break up vehicles and there's this beautiful, hilarious, transcendent moment when the driver comes free and doesn't explode in triangle based body horror. And all the failures and struggles to do this before make what's ultimately a completely different, feel really meaningful.

And a really great example from the adventures did cast where all the leveling up admin is done in the trip to fantasy Costco where you can buy magical items sent in by the listeners and the DM kind of marshals all of the stuff that sent in so nothing is allowed to be too powerful that will break the game and that kind of thing. Except for this one idea sent in by a seven year old that's just so adorable, that they include it anyway, so the flaming rage and it's hung on the wall

as complete with it at an affordable price tag of like loads we included that you can never buy it because it would totally break the game.

And then I know two years into the narrative. They go to Costco one time, and there's this other item on the shelf that if you win a persuasion check it lets you swap this item for someone else's most valuable magical item. So Magnus buys it. And he also buys a book that once a day you can read this one on the skills check. So it actually says I read up on persuasion checks, please. And the DM assumes that we've all spent our money will be leaving now. I'm Magnus as well hold on a minute. I'd like to trade this item for that lovely looking sword. And you can hear in the background DM literally panicking is realizes what's about to happen. How Magnus wins the role, and hilariously impossibly wins the sword that was supposed to be for decoration. And it has so much meaning because it wasn't supposed to be possible.

It's like regardless of your plan. For the story. The player had a dramatic action and they had at one time there was conflict and an event that changed everything. And this could be in a meta story between the players like with the bus driver, or it could be part of the actual story like the sort of DNA so collaborative storytelling is when the game is also making the story not just making choices in the story. So we've already touched on good gameplay can make a thing compelling even when the story is a bit rubbish. By giving birth to the story, it feels amazing to you know, it can feel like a prize winning stuff even though it's an outside It's probably nothing special, possibly considerably less than special.

And actually, almost every single sci fi and fantasy magazine publishing house submission guidelines explicitly say, don't just send us your d&d campaign. We can absolutely tell they don't work as novels. And it's because what's compelling when you're a part of it, when you're creating it isn't necessarily lessons. Everybody thinks beautiful. Which isn't to say that your d&d campaign can't be Booker Prize winning stuff. It's just that for you to enjoy playing. It doesn't have to be that good. It feels great because you're having good fun.

So how do you make a great collaborative story when not everybody playing has thought this hard about how story works, and how do you keep them stumbling in the right kind of direction. So there are some things to consider which were the rules of improvisation. The three clue rule listed be what's important so that you can give your players freedom to explore and looking at node based design and how to let go of control without losing control the rules of visual comedy apply anytime. So this is the power of yes and rather than no bath, which is different to the same question yes or no? Yes. But no furthermore.

Let's illustrate that example from nothing that was blank. So like whenever you're trying to improvise or brainstorm or anything in the space of Yes. And like you can't negate something that somebody else has said, you don't judge it. You have to accept it. And these kind of rules for life will improve everything. Generally. That person on your project is constantly negative about things and people and errors and reasons. It's really demoralizing, the negative and it's everybody now, it's your willingness to try and to fail, whereas the opposite opens up space for possibility and connections. So the one on the left, they're in no bad space. So a I'm having

trouble with my like, b I'm afraid we'll have to amputate a you can't do that. Dr. B, why not? A because I'm rather attached to a bunch. So there's a joke, but it's the real images below that line. You can't do that doctor. So just stalled all the momentum that was building up on the right, same people again, but now that yes, and space. So A, B, whatever is it man a it's my leg a doctor? B that looks nasty. I shall have to amputate a it's the one that you did last time. Dr. B. You mean you've got a pain in a wooden leg? A Yes, Dr. B. You know what that means? A no wood? Yes. Which I have to remove it before.

The rest of you. That's so it's funnier and it feels effortless kinda like they find it. But really they're just taking whatever the other one handle and running with it. And they do something with it rather than refusing it. So it's really interesting thing going on here that there's conflict in this little seat. Even though the meta story is two people in violent agreement with it. The conflict is really with the audience is that constantly investing our expectations about where everything's going?

I both have a objecting to the amputation. But in the first one, they're refusing the amputation and in the second one, they're making the joke Have you already did that? So it's a sneaky but really important difference. So when you're doing collaborative storytelling, everybody needs to be in agreement. We don't rules about the ideas thrown into storage. So characters can debate and objective things and argue, but ultimately it has to be done. By accepting other people's right? So the DM has to handle like, I'm not going to let in a way that doesn't shut down the creativity of pirates. So like, instead of just saying, like, No, you can't do that. You can say well, you can absolutely try. But here all the reason like here are all the consequences and the outcomes you can hope for. So you're not telling them no so much. You're telling them that you already like or you can do it with a sort of toddler management technique to offer them a choice. That doesn't include the thing they can't have. Oh, you're going to put me you know where the red towel the blue coat so you're still giving them a choice and agency without them, letting them derail everything and without killing them and etc. And it's all really about conservation of momentum. So the Nobody forces you to stop and go in a new direction. Well, yes, and is adding topspin or going in the same direction or around speech direction is a really good way to think about this same question answers with yes no yes but no and furthermore, so yes, sucks is an option except at the end of your story because it ends the story. No, such as an option because this kills momentum. Yes, but a no and furthermore, a really both Yes. And in terms of accepting what's happened and running with it, adding either topspin or slingshotting in any direction.

The story so there's this idea of the three clue rule. So when a story gets interactive or collaborative, you lose some of the ability to take how and when the audience learn important stuff in the story. If you're writing a novel you get to set the time and place that people find out everything.

But when you're doing a collaborative story, the best you can do is kind of put the clues out there and hope that the players looking the right place or going to the right place or take the right actions to reveal it. So anytime there's something really important that you need to

communicate. You should make it three times are there there should be three opportunities to get it because they might miss the first one. They might not understand the importance of the second and by the third time we'll be like ah, that's probably quite interesting. We should pay pay attention to that.

So if it's a murder mystery, there should be three different clues. To point to Colonel Mustard did it or like it was the type that kind of thing. But if you need to send them to a certain location, there should be three different pointers. That's probably a really good location that you should go to. And sometimes it's super obvious. So just the expectation that we're going to have a boss like sort of forces people to think how are we going to get to the bus. But you should never underestimate plays ability to mistake trivial set dressing for what the story is really about or the most interesting information. So by having these three routes or signposts or mechanisms to get them where you want them to go you're giving the freedom to explore instead of railroading women refusing every decision that's not exactly the one that you want them to take.

And when you understand what's important, you can then give them a lot of freedom to go off piece. So if you create yourself a cheat sheet of this is the information they need to get from this scene or this location on this character. And have it handy when they decide to do something absolutely crazy that you didn't anticipate you've got the bare bones of what you need to impart to them in this crazy new reality that they throw you into. So maybe you wanted them to go and speak to the judge, but instead they get both like what you've got bullet points here of exactly what they need to learn that you could throw into that bar fight. Or they could overhear when they're in the cells after being arrested or whatever. So your players will think you're a complete wizard, anticipating all of their bizarre choices, and they'll feel that they have all this agency in the world.

But by knowing what this little bit of the story is meant to imply and still communicating it to them, it doesn't derail all your plans, all the rest scenes and the story around that one crazy choice. So this is all about node based design. So collaboratives storytelling isn't like a choose your own adventure, where you read a page of text. And then you offer them a binary choice of go left or go right, or grab this or use that.

In that sort of branching narratives. You're superduper in control, and they're just choosing which path for you allow them to follow. But in collaborative storytelling, it's much more interactive, folks are telling you what they want to do rather than you offering choices and you can only do these things. So you should think about planning nodes in the network of a story rather than branches in a narrative. So ultimately, they have to get to the boss fight, but you want them to learn who the boss is, where the fight will be, or why they need to have the fight. So you can use that three clue rule to point them and all of that information but in a way that they are. Get complete free. Run around and explore and figure all this stuff out. And there'll be locations and characters that are common to all three of these things. So you can drop the information into different places. So you prep these nodes of the network and the players can go into any of the locations or just one of the locations and there's no correct path.

There's no being railroaded. But if, however they explore they can stumble on all the information that's necessary.

So those three links take you to some really good in depth explanations all of those concepts. So how do you let control let go control without completely losing control? And this applies to all interactive stories, not just the collaborative storytelling side. And basically, there's this huge conflict between player agency and story coherence. So the more choice and the more choices you give the players, the harder you have to make the resulting story coherent. To make that emotional arc make sense of all the concrete actions as a plot. So loose threads are just the worst. What happened about I think that I cared about that story since just completely scalable. And there's a whole bunch of ways that you can mitigate this inherent contradiction. So the first one you can just write a million novels.

So that the fundamental problem of Choose Your Own Adventure is that every choice has to matter. So it has to matter now, and it has to continue to matter till the end of the story. And that's kind of easy to do when your branching narrative is linear. So by being at this point of the story, there's only one way you can have reached it. And this basically means that you write a discrete novel for every path in your narrative. And you can totally do that. It's just that it's a huge amount of work. And as soon as your branches reconnect or loop, it starts to be a little bit impossible to keep up.

So you can't be sure how they got to this point in a story anymore. So like, it starts you end up with these either stuff doesn't matter anymore. Or you get these weird disconnects, where the reader hasn't experienced the version of events that led them to this point that you're expecting. And that's like a hiccup for the reader and it feels weird, like they've made a mistake, even though it's the game or the story that's made the mistake. And you can use things like ink and time to keep track of exactly where the player has been and how many times they've been there. You can use conditional logic to change what we see. But really, that's just making every single path through the narrative, explicit lunches again. So the fundamental trade off is depth versus complexity. The more the more choices you offer, the more work you have to do, and the less of the total content that you create the player will ever see. So sandbar loads io game, is that taken to the extreme? You only get to make like one or two choices in this whole story, but almost everything you can think of.

You can write lots of smaller self contained stories. And you can use like gathering points in the story. So that there are these key notes that every story path passes through. That kind of keeps the main plot on the same track. You can craft your emotional arc around something that's relatively stable. No matter what path you're playing, it takes you the story. Or you can use sections in between those kinds of nodes, as many self contained short stories or shorter deals. Choose your own adventures where it's much easier to keep the story coherent, because there are fewer total branches through that story. So 80 days, this really, really well. You have absolutely absurd freedom to choose your route around the world in this game, and sort of the overarching game is can you actually get around the world in 80 days and choosing a route trying to find your route by buying and selling on the way but then individual parts that you can

take, have these little self contained choose your own adventures. So there's a love story on the Trans Siberian Express, or there's a murder mystery on a particular flight across the Pacific. And in the storytimes. It kind of makes sense that your decisions are limited a little bit while you're on that train or in that aircraft. And like how else are you going to make a coherent story out of something that hasn't literally millions of possible routes. So that's a good option.

Another option is that the story structure doesn't change, but your choices influence who does the things in the story or what motivates them, or colors, the language that you see the story through? So inco study in Scala, it's really good example of this. It follows the plot of the Home Story, but you get to determine through your choices whether it's what's on our homes that picks up the poker to serve the fire and you can make homes angry at you're pleased with the depending on how you are and that changes the language that like the adjectives and stuff. So this story looks after things happening that you don't choose to do. So the plot can say mostly constant, while giving you freedom and agency and your choices having meaning within the context of that are similar but different. The story doesn't change at all. But discovering the story is your agency. So that's pretty much every murder mystery ever.

Her story is just a stunning example. But if you haven't played it, and it's about two hours at most, it's on Steam. It's incredible. The premise is that in the mid 90s a missing persons investigation became a murder inquiry. And the video of the suspect interviews has been corrupted, and they've recovered. You've been handed the recovered hard drives. And most of the videos been recovered but in 30 seconds or three minutes, snippets of the bigger interviews. And so you search the database by keywords to find videos to watch the video to things what happened and like each video you watch leads you to other things like that person has been mentioned that events been mentioned that places prevention. So it's sort of three clue rule stuff going on all the time. What you watch the data, new bets. And there's this earth shattering moment when all the disparate pieces fall together. And you just you start to understand what happened so good.

It all comes down to giving players meaningful choices. doesn't have to mean a lot of choices. Just choices that have meaning to them, give them agency. So sometimes the choice isn't that over. So Silent Hill begins with an interrogation that's under the surface psychologically profiling you based on your responses. And then that informs everything else that happens in the game to maximize your discomfort because it's a hard game. So in the next year, you wake up in a car crash. And if your score said that you trust authority figures, the police knew me is just the worst. But if your score said that you really don't trust authority figures, the copy is super helpful and nice. And it's all done. They just quietly subverting your expectations about all the characters that you meet in the game.

And sometimes chasing gameplay is completely unrelated to the story. So you're solving puzzles or achieving this level to unlock the next bit of story, but it's more like BEDTIME STORY reward. You have agency in the gameplay, but it doesn't change the even at all affect the story itself. No choice is the site by so calculations aren't a choice. That's when there's an actual right and actual answer. So optimal path and any choice that deviates from it is less optimal. So this is

usually broken game mechanics or unbalanced games things so like in pandemic, there is a optimum selection of player characters and turn order which gives you the best possible answer. It doesn't mean you're always winning, but it's a better choice than any other choice. In terms of your the possibility of winning.

And people don't really like being offered choices that aren't really choices. And they especially don't like that if the story holds that against them later. It's like Look what you did, and the players gonna be like, well, you made me do it. That's not fair. Preferences aren't a choice. So they drive engagement, but they don't. Don't mistake them for actual choices. So letting someone pick their avatar or name their character to make it feel more personal, which drives investment but it's not necessary for people to invest in the character. A good story just makes that happen. And people get wise to being offered the illusion of choice when it doesn't actually have consequences in the story.

Good choices have no right answer. So it's all dramatic action conflict stuff. You should want to do both or not do either. It should be an impossible choice. And the game needs to have memory about your choices. So if you made this choice, it has to matter now and it has to keep mattering or the story is going to feel really weightless and arbitrary.

So process and product writing a story or creating. These aren't performance art, like it doesn't just pop out fully formed and perfect. Begin typing at page one and keep going to the end and tada you have a story. Writing is not typing, you know magically create again by draw cards and by the time you've drawn an entire deck of cards thing you have a perfectly fully formed perfectly balanced game. Like it doesn't work like that. It's like ironing a shirt. So you have this idea of where you want the game to go. And it starts off as this rumble mess. And you just keep going over and over and over and over smoothing out creases and the wrinkles until eventually you have this pressure and it's messy and repetitive and doing it wrong loads of times before you find the fix for something which immediately takes you to write something else is broken and round around around again like that.

And it takes time and it takes feedback and being able to accept it's not good yet, without feeling like that's a permanent judgment of the worst of the story of the game. Or yourself, which is superduper hard to do because we invest so much ourselves and creative things. It's like a five year old showing your painting like they're not asking for a critique of airbrush work. They're saying, Look at me, do you still love me? So it's really hard. We have to try and do your best to remember that you are not the problem with your story or your game. The problem is the problem. And getting good feedback is a fundamental part of writing a story or designing a game. It's like learning to speak another language. You don't know if you can do it until you can speak to someone in that language. They can understand you and you can understand them back.

So there's this thing the critical response process. There's a link on the next slide.

That is just such a good way to get feedback about stuff without destroying your conflict or destroying your confidence or other people derailing where they want your work to go not helping you get it to where you want it to go. So it's really good thing to look into. Finding a story is not the same as a shape of a story. So story structure models like 3x or 5x or case you can't get to etc. They don't tell you how to get there. They just tell you what it looks like when you've arrived. So the method is a process of finding a story rather than the structure of the story that you find. And it's a really useful process and it's something I apply to nonfiction as well so you can replace everything it says about plot and character with information and understanding and use it to shape a nonfiction essay. Or an analysis report, which I do.

And there's just this really delightful meta narrative of life. Like every game you design every deliverable you have every project you work on, on a story structure like you're venturing into this dark place facing many obstacles. Having this offer what was I thinking agreeing to? This right when right in the middle and a boss fight where you try and deliver and your choices either learn and grow and triumph, although perhaps but not by winning their deliverable or turning it into a tragedy or not managing to change at all.

So all the things that you learn towards design and story back in this delightful circular thing. So here's a bunch of further reading links on all of that stuff, and more. And that's pretty much it for me I will stick my video back on we can have or you can all kind of stare at me and dribble because that was an awful lot of information to throw at you in such a short period of time.

Definitely silence
your mute Charlie

Charlie Hepton 07:03:13

Sorry, I have a double muted myself, Justin. Just in case. Being the first presentation of the day is always Oh, you'll always have a little bit of silence but it was a really great presentation as always. And I think X's put his hand up already. And if you want to go ahead.

Unknown Speaker 07:03:40

Hello, hi. I'm fantastic presentation. I'm very curious what your thoughts are thinking about sort of this this narrative structure and sort of framing the characters conflict in like a large multiplayer game.

Sally Davis 07:04:02

So as in giving every plan the story arc to me. Yeah, because in a single player game or at least like a small team game like CO opt in and video game setting or tabletop RPGs. That's at least somewhat straightforward. But in a large multiplayer setting where everybody wants to be the hero or is that nice? Yeah, so everybody is the hero of their story. So you can tell the same story from multiple different perspectives and each person will have their own arc in it. And if you look at like ensemble, films and drama and stuff, each person has their own kind of arc and then there's one of the best like that the main protagonist, and so the whole film frames their arc as more central, but each of the individual characters have their own arc too. And so, the more players you have, the more work you have to do if you want to give each one of them an

individual arc. So if you look at something like the Joss Whedon Avengers, the first one, the amount of work that goes into setting up that boss fight, to make everybody have individual stakes and conflict with Loki, for they all want to work out their stuff against him to make it satisfactory. So that's kind of what you're aiming for, but it's super duper, duper hard. So sometime, depending on the scope of your game, you might need to make it but you're all collectively rooting for a more abstract concept and that's carrying the arc or rely on really compelling gameplay so that people feel like they're getting that change and growth through leveling up or winning points or contributing to the whole

Unknown Speaker 07:05:54

Fantastic thank you.

Charlie Hepton 07:05:56

Thanks. Sorry, sorry. Can you see the the hands up now? I can see that up. Yep. Okay, I'll just let you go ahead. And let's not forget X who's up next.

Unknown Speaker 07:06:10

Thanks, Sally. And you know, just a commentary on you know, this is really a reflection of game as art and science. And really, that all art is also made better with a scientific knowledge or technical knowledge of that art. Whether it is drawing and and pulling from drawing school or writing and pulling from writing school. I've got this great deck. I am not selling this deck. I am just saying as a helpful tool. The there's a fabulous deck. That's based on the on the three act structure, which is a really great and relatively quick way for for game designers to set up their story. And you know, as we'll discuss in terms of game design, 101 The way I set up my stories, you know, quite literally on a wall whether it's virtual or a physical wall in my office right here with post it's an index cards, because with that bit of structure that that Sally's been been talking about. You can really make a compelling narrative that drives the players, the participants, especially in this serious game where let's face it, they might not actually want to be there. And that's the big difference between a serious game and entertainment game to really drive that. That engagement home was the the the tools that Sally's been been discussing.

It is indeed. Thanks so that that was really really useful and insightful. I'm going to stick for everyone else. I know you've already seen it. The link to the ready initiatives, outbreak ready simulation, which is a narrative choice game and I I wanted to sort of put on the table some of the challenges we had in designing the plot. One is it had to be hyper realistic. It isn't intended for newbies it's intended for people who have years of frontline experience as you add trade workers. One of the problems in that context is cause and effect is never knowable. Maybe a couple of years afterwards, but you can't do the normal plot event. If you do something and it turns out well, or it turns out that that didn't stop there from being feedback. Loops. But it meant that if the game was to feel real to the people who had to play it, you had to do lots and lots of stuff and maybe find out at the very, very end if it was useful or not because in real life, you're a small part of the puzzle. You maybe only account for 3% of the variance. And outcome. Things take months to have effects and so forth. And so it was a challenge. And the other

challenge too is that an awful lot being humanitarian team leader is just being flooded with emails and text messages. It's not exciting going and talking to someone. can you convince the troll if you can cross the bridge it's it's a lot of a lot of information management and learning to parse information quickly and so forth. And that was that was a really difficult challenge because the ways you would write an engaging narrative choice game would have they might have been more fun but they would have been completely unlike the real thing.

The other the other thing, too, is that much of the learning occurs outside the game. In this case, it's the discussion of why did you choose a over b? How do people feel about stuff? So this has been designed in the context of a supporting course where there's a lot of discussion going on outside the game, but I don't have a quick I don't there's a question here. But I must say it was difficult because the things you identified which I think you correctly identified as you know, the things that are associated with engaging narrative and choices in narrative games would have been technically wrong.

In this context, had they been used too much because they would have implied you can do X and you'll know in a turn or two, if that turned out to be the right thing.

Sally Davis 07:10:25

Well, so I think there are ways that you can fudge it. So if you plan your story, following that structure, it doesn't mean that you keep the audience in the loop about all of the things so you can set what the consequences are at the moment they take the action, but you don't give the player feedback until much later. So you're still you're still following that underlying structure. But you can obfuscate it to them, or you can give them frankly misleading information. And some of the stuff I talked about yesterday about how you can play on the audience's assumptions without you don't ever explicitly say a thing. But you lead them towards thinking it so that then you can subvert their expectations completely by saying well actually, I never said that was true. And now look where we are. It's this other thing.

Unknown Speaker 07:11:16

So I its attention, but it's not mutually exclusive. No, I think you're right. There are a bunch of there are a bunch of feedback mechanisms that show up at various points in a big one. Yeah, I think Ironically, one of the utilities of doing that for new audiences is to disabuse them of the knowledge that frontline humanitarian work is exciting doing stuff as opposed to parsing hundreds of emails, and that it feels a bit like pushing a piece of string at times because it's very difficult to disconnect, to know whether you actually did the right thing until it's too late and you've done it and you're now to your after action review to see whether you did the right thing. So it's actually being used as useful as a filter when played with new audiences because they Oh, that's not what I actually thought it would be like, I thought it would be like, unload the truck. And you know, I get icons for orphans. Yeah, exactly.

Charlie Hepton 07:12:12

So, um, we've got one last question from X, but then we'll have to sort of wrap things up to take our 10 minute break. But if you want to continue this conversation later, we've got our networking and we've also got the q&a for speakers and the voice channel on Discord.

So Sally, X asked what your thoughts are on ways to put a data extraction layer around a narrative focus game used in a professional context. So is that in terms of capturing like a collaboratively told story?

Sally Davis 07:13:02

It's a really interesting question. Oh, wait, there were lots of like some of that's just sort of housekeeping like you can have scribes or you can just record the audio and then transcribe it later. Or kind of that kind of thing.

Yeah, sorry about. I didn't have my mic turned on. You know, the, the idea is if you're using sort of Matrix style and some of these narrative style rooms to floor sort of problem clinician, getting people to understand to a narrative engagement like this sort of what the, the actual problem is. But what we find is that the, if you just have someone who's assigned to be a data recorder, listening in and trying to write down what's going on, minimizing the engagement with the players to keep them from being distracted, they just give you sort of deal that, like you say you can just record what's going you lose a lot of what's going on.

You don't see what's to some extent what's going on in the players heads with just a transcript. So to me the the sort of the crux the kernel of the question, what was more, what do you see as the amount of acceptable distraction from those injuries sort of interjecting questions about what's into the game is that that you would weigh from entirely experience to keep him from going distracted in a discussion about game in the middle of the game? Or is the just sort of recording what's going on and then asking people after the fact with the corruption of reflective retro history occurring? clouding the results because that's, that's the duality. I'm just interested in your opinion. Yeah, it's really interesting question. Um, I think it really comes down to what your game is trying to achieve and what what you're trying to record.

And if it's important to capture that thought process of how did you know when we're making these choices, but what prompted that choice, you can have people like filled out, like write down on a post it note when they made a decision, what the emotion and the logic and the reason driving that decision was and then it's like super quick.

It shouldn't be too much of a distraction from what's going on. But then at the other extreme, something that we're doing in DSL right now is working with a couple of academics from University of Edinburgh and another university. I can't remember which one, but they're in the English literature departments. And a bunch of analysts to think about the future are writing sci fi stories to explore things that we might need to think about in the future. So like if you're supposed to do analysis about a no future for so a future capability kind of things. Let's write sci fi story that explores some of the murky stuff we might get into so we can look at either the moral problems or what really cool tech Could you come up with? Like if you look at Arthur C.

Clarke stories, like he invented geostationary satellites before they were a thing so like, exploring the story space can be an entire game in itself. Like, deliberately write it down as a story rather than making it an interruption to the game. So I guess it's just what are you trying to capture which is always on everything and Wargaming comes back to.

Charlie Hepton 07:16:55

Thanks Sally, and thanks for for that interesting question. I think we're going to take our 15 minute break now.

We're running a little bit behind but we'll just change our 20 minute break later to a 15 minute break. So if everyone could come back at 25 past, whatever time zone you're on, for those of you who started at half past that will be 55 past instead of 25 past. Thanks, everyone, and we'll just put another link to the game design challenge for any last minute signups.

Unknown Speaker 07:17:26

Hey, Sally, I'm gonna take your response talking about English majors. A validation of the windmill till time on to try to buy the part of the government I work for two prohibits us from hiring non science and technology people that your weight is behind the idea that that's a self destructive or at least a very self limiting caveat.

Design 101

Stefanie Game 07:33:26

And with that, we are going to get started on design one on one. So the two speakers for this session are two of my mentors Professor Rex brynan, a professor of political science at McGill University, and senior editor of the conflict simulation pack Sims. He is author co author or editor of a dozen books on various aspects of politics, security and global development and recently served as a serious games consultant to the ready initiative on infectious disease outbreak and as a member of the W H. O G O Arn Working Group on online gaming for enhanced outbreak response and my former Prof. And our second speaker is Tom Fisher president and founder of imagine Medic and the legends serious games and facilitation course, is a serious analytic game and simulation based training designer, developer, teacher and facilitator with over 30 years of experience. He was part of the development teams that produced aftershock. Magic, and cases, among many others. Currently, Tom and his team, which happens to include me at this point, are developing novel tabletop digital and hybrid games worldwide for various organizations including UN agencies, NATO CRC, and private corporations on topics ranging from multi domain warfare, emergency supply chain management, pandemic response, it crisis management and humanitarian aid camp management, so I will let them teach you everything that they taught me in 45 minutes.

Rex Brynen 07:35:00

I was gonna say Stefanie, so we're essentially cramming 13 weeks of course plus three months of game skill development with Tom into into, they ever spend 30 minutes here and then they're ready for the professional. Yep, yeah. This is the quick version. Okay, so the plan here is

that I'm going to start and then and then Tom is going to get to continue. You've heard our introductions. There are a couple of games that we've worked on together. The first is the matrix game construction kit and Tom Mouat, who was our our co conspirator on that is on is here too, and the other is his aftershock. My background is actually another game we worked on, but it was less serious because it involved giant lobster eating the Atlantic provinces in Canada, although I must say that the military and emergency services modeling was really accurate. So I have don't worry about this. I'm going to paste all of this in later when Thomas speaking so bizarrely put the further reading at the beginning. But just some sources that I think are particularly useful when you're thinking about serious game design, a bit of a tilt towards forgiving, but but not entirely. So all of these. I will paste up later and I've already pasted a link to the PDF of the slides. In the chat. So what are the steps I go through? This is gonna be 30 minutes of really fast stuff. As I said.

The first question you always have to ask is what is the purpose? What are you trying to do with the game now this may seem an obvious question, but frankly, it's one that's not asked often enough, or clearly enough. And often I'll have a client come to me and they'll want a game and it will be really clear that they don't know exactly why they want a game. They want a game because it's trendy. They want a game because they like games. They want a game because their boss told them they need to do to do a game.

And you really need to clarify is what kind of game is it? Is it trying to answer a question? Is it an analytical game? Research game? Is it a policy development game? Or is it a learning game? Are people is it being used in educational or training environment? And if so, what are the key learning objectives? And this can take quite a lot of work to pull out of your sponsor because they haven't always thought of it fits an analytical game or a policy support game.

Stephen Downes Martin has written extensively on the three witches of Wargaming. And that is the challenge of dealing with with your your boss and your sponsor, and your client and the ways in which there may be certain pressures to design games. In certain ways to for example, validate preconceived conclusions.

The danger of what I call game washing, where someone wants a game in order to prove that they're right as opposed to a game to answer the question. You always need to ask Do you need a game and I have to say about half the time someone said can we game this? I said I could. But I'm not sure you should. Because I think there are easier cheaper, faster or or more effective ways. And this question will come up over and over again. Do you really need a game?

All of us are here because we like to use games. We think they're very useful and but there also can be a danger and excessive game evangelism. It is simply a tool. It's a tool and a very big analytical or pedagogical teaching toolbox. And sometimes it's super useful and you should use it and sometimes it would be better to use a screwdriver. And I think you need to ask that question throughout the process. So let's say we know what the purpose of the game is. I always like to know who who are the players, one of the participants who's going to be playing this game. How many of them are there? I mean, if there's two, it's a completely different game

challenge than if they're 200 If they're available for a week of play, which happens sometimes in the national security space. That's a very different than if you have them has to be fitted in a classroom period of two hours or less. So who are your participants? How many of them how available? What are their their seniority? Is their backgrounds their expertise? Are they newbies, are they subject matter experts are there hierarchy? Issues? Do you have senior people in junior people? Are they all senior? Are they all Junior? There are social and other characteristics we've talked about intersectionality earlier in the in the conference, those may affect the kinds of dynamics that you can get or you want to get or possibly even want to avoid at the game. What are the resource constraints have to ask this right at the beginning? You have to ask this right at the beginning. How much time how much money do they have? Do they want it in two days? Then let's do a seminar game or a matrix game possibly. Do they want it cheap? Don't do a digital game.

I've worked on digital games in which the development budget exceeds the cost of every manual game I've ever developed in my entire life in a single project.

So how much time do you have to develop it? How much money do you have to develop it? How long does the this is the game play time? I've already sort of addressed that one. What personnel do you need to have it you have available to support it? Some games need a lot of people to support some not so much. Don't design a mega game with 100 people if it's going to be just you running it and you don't have a series of controls to help you out on the on the sub games.

Facilities. Where is it going to be held? Do you have breakout rooms? Do you have a table can you move the tables are the tables the same height? Are they all different heights when you put them next to each other? You'd be surprised how often that is a problem.

Do you have it? Do you have data projectors are their security requirements? If you're working in a government or national security space, refreshments, how are you going to feed them where you're going to put the coffee machine you may think this is funny but I have actually brought our coffee machines to a NATO conference because the budget didn't extend to coffee and we needed a coffee so yes the ones that Tom and I we use were used to support a NATO operations research analysis conference in Ottawa. Is there parking can people get there? All of these things matter to for for a game? If it's a game that's going to be marketed? What is the price point Will people buy it aftershock is not designed as a hobby game magic is not designed as a hobby game. Their price points are higher but it's they're not. That's not necessarily a problem for the people who are buying it for the purposes they're buying it.

When you consider all that do you even need a game when you consider all those difficulties is is really a game the best way to go.

What are the core dynamics of the issue to be modeled?

So what is it that you're gaming? And do you have enough of an initial understanding, therefore of what the game is going to have to include or address?

Because you can't really think too much about your game mechanics unless as a designer, you already have some sense and you're going to have to do more and more research of what it is that the game is actually about and how that thing kind of works. And how do you know how do you know do you just based on what you think in advance? are you basing it entirely on what the client told you? You need to do some independent research it may turn out that there are multiple competing views of how this process works, or it's more complicated than you first thought or there are really core choices about how you what aspects you focus on and so forth. So you have to get some real sense of what it is you're going to model and you're gonna have to do that much more as we go on but I think early on, you have to have some sense of what it is and how that thing works that you're going to build a game around.

So let's say we've got to this point. It's clear what the purpose of the game is. If you had to discuss back and forth with the client, what that would involve. You've worked out how many players who they are, what kinds of challenges that may or may not present and so on and so forth. You understand the resource constraints, how long you have to make it how long? How much money you have to make it where you're going to hold it. If the facilities are appropriate, if there were security or it constraints, and so on and so forth. You have some broad sense of how the process that you're gaming works out or you can have to do a lot more research on that before you start designing game mechanics. But at this point, you should begin to be able to think in general terms and Tom will talk about these things much more detail a little bit later. What kind of game approach might work best.

And there are lots of lots of choices here. First of all, does the game need to be adversarial? Does it need to be cooperative or does it need to be semi cooperative or is it so what solo there but it could be a solo game you're playing against the game system.

The first to the adversarial and cooperative are the easier design spaces semi cooperative games are the most interesting challenge and I would argue have a lot to do with the way policy issues for example, actually operate. I mean, people are kind of agreeing but they have different interests and they don't necessarily always align and I think that's a particularly interesting design space. So you need to decide that.

Are they going to be there or is it going to be distributed game are people going to be paying remotely in in some fashion or not? Always there's some advantage in doing it one way or the other? Are you forced by COVID or the nature of the players to do it as a distributed game? House how much randomness how much chance are you going to have in it I wasn't going to use stochastic unpredictability randomness in the game or is it going to be largely deterministic?

A lot of us are game players were used to rolling dice there are audiences for who dice are deeply problematic. Sometimes for cultural reasons designing for Saudis, but more so because

they say oh, that's it's it's Snakes and Ladders. You know, it's monopoly. It's not serious. I see you have dice that this is actually an MA thesis written in King's College London all about the allergy that military officers have to seeing dice written by someone who ironically worked for Bohemia Interactive designing military simulators, which had stochastic process process, hard coded into them but people didn't notice that but that part of your choice here is not just how much unpredictability you want in the game, but also what your audience will accept how you have to present it and why it's their main game doesn't necessarily need a lot of randomness. randomness is represents the known and unknown unknowns in the in the game environment. So do not throw a D six at everything. The issue I sometimes have with students that they want to die roll for absolutely everything in the game and that could be deeply problematic. In policy games, people may feel the outcomes just because they roll two ones in a row. In a learning game. They may feel they didn't fail because they had a bad plan. They failed because they rolled two ones in a row. So if you overuse stochastic process it it can or random this, it can undermine your game.

Is it a digital game or is it a manual game? If it's a digital game, it will take 10 or 100 times longer to design and it will cost 10 100 or 1000 times more, but it will have many advantages too. We are in a in a problematic era when people look at high end entertainment games and think I went something like that, not realizing that they can have development budgets of 50 million to \$400 billion. We're approaching the size of some small countries for the development budgets of some very high end digital games. And so when you often tell them Well you can't really buy that. For the amount of money you want to spend they can be can be disappointed. There are advantages and disadvantages to both kinds of games and I we could spend the whole time talking about digital versus manual. They're both great, they both have drawbacks. One is cheap peering easy to do. One can be much more complex, much more sophisticated to have fancy interface can have more self teaching elements, debrief elements built in equally good I have no particular preference but they do have strengths and weaknesses and you need to consider that. Is it rigid? Or is it free? Rigid games are those that are rules based monopoly. Almost every digital game you've played where everything is coded into algorithms you can do what the Game Designer allows you to do and you cannot do things that the game designer does not build into the game. In monopoly, there are no rules for helicopters.

So a rigid game has the advantage that it can be very much modeled on processes you understand and you can hard code those into the game. free games that umpire is deciding or in a matrix game, the players are deciding the outcome they're doing the adjudication can allow much more innovative play. Crowdsourcing ideas in a matrix game in particular downside is that you the game may reflect the biases of the umpire rather than sort of some operations research that might underpin a more rigid game model. Is it turn base or is it continuous, or some combination thereof?

Is it synchronous or asynchronous? It's everyone playing at the same time or does team a mail in their moves, email them in and then a bit later, Team B? Does, you can have games that are asynchronous. You can have games there are also a mix of a lot of these things. So my brain at a peace building simulation, which I didn't run this year because of the pandemic has sub games

which include almost all of this in one part or or another so all of those things you need to start thinking about as well. And there are trade offs for all too there is no magic best answer and you cannot answer these kinds of questions unless you're clear about those previous kinds of questions. What is the purpose of the game? Who were the participants? How many of them are there? What are their characteristics? What are the resource constraints for designing and running the game? And most obviously, what are the key dynamics of the issue you're trying to get at and what kinds of mechanisms would represent those most effectively?

Sometimes when you start asking all of this, seminar games get poo poed a lot by I think a lot of serious gamers. A seminar game is when you sit down, you're given a scenario maybe you're in sub teams, you have a talk about what you would do, you come up with a course of action. It goes up to the adjudication team, there's often a coffee break or lunch break or a day break, and then they come back and brief you on how the scenario has changed as a consequence of everyone's actions and then you go back again, these can be quite long and complex. They can have both rigid and free adjudication behind them.

They are very accessible to policymakers because it's a bit like policymaking. You're sitting in a room discussing the situation and deciding what to do. They're quick and easy to organize. And although they have problems and they particularly have problems, because often they're only run for a few turns, and there's not a lot of interaction in iteration in in the game. They can be a really useful quick way of having people think about a scenario which is why they get why they get used a lot so in some cases, it would be far easier to design a seminar game than it would be to design a board game or certainly a digital game to get it same thing to decide. It depends what your purposes I should also say it I don't have it here. Is it bespoke? Are you running the game once? Or is it a product you want a lot of people to play over and over and over again that has profound effects on how you're going to design the game as well. And then you have to start building the game model and the core game loops. So you now have to get much more deeply into how these things actually operate, how you're going to represent them in game mechanics. The game loop is what the player does. It's what the player does, the sequence of actions or turns or choices that they have, that they're essentially usually doing sort of over and over again, turn turn based or otherwise. And so now you get into building that game model and the game loop using the various mechanics and representing the various choices that you've made about game approach.

Depending on the game, if it is I analytical game, you need to think about data collection and you need to think about it as you were designing the game so it actually applies to both of those bottom bullets because you're doing the policy game. It's not just enough to find out how the game turned out. You need to know why the choices were made and what the discussions were you need to instrument your game in some way. And Paul Weber was talking about this earlier today. You know, how do you collect information on why teams chose a over b because that may be just as important as the fact that they chose B what how did they perceive the trade offs? What information did they have, what information did they not have? etc, etc, etc. You often need that process of your data collection plan and your game design have to work in step because you need to be thinking to the game design. Is this going to pose particular

challenges for data collection? And he made a good point. In discussion games, it's actually quite hard to collect information on what everyone is doing and why they're thinking it and so forth and asking them after the game you can ask people after the game what did you experience in the game but that's actually not what they experienced in the game. That's what they remember at the end of the last turn. And we've done some data collection where we've asked people during the game what they thought was a threat and then we've asked them at the end of the game well what were the major threats in the game and they do not map closely what people were thinking on turn three about the game is not how they remember the game at the end of turn 10.

If it's for teaching, how are you going to assess how are you going to debrief the game in both of these cases, the game is only part of a larger process, either a policy development process or an educational process. How does that fit it? How are you going to make sure you've got the right learning objectives? A real challenge with educational games is games are simplified models, which means they are great opportunities for students to learn the wrong thing, because they're so focused on this simplification that they're they're putting too much weight on it in other words that the game is signaling a simplified view of the universe. And often it's extraordinarily important to have a discussion about all the things that were wrong with the game, or all the differences between the game and the real situation after the game. There's an entire book on digital simulation called simulation. Its Discontents, which makes this argument about digital simulation and the ways in which it can be misleading because it's so beguiling and so engaging, that people start mistaking the simulation for the real thing even though there can be significant variation.

James Dunn again has identified two rules of work game design but close the quotes there to continue coding, which is keep it simple and plagiarize. Keep it simple. This is a perennial problem games get way too complicated way too fast. You think okay, I don't have a rule for the pastor requirements. of the Italian Army in North Africa. So I will add one very famous example campaign for North Africa but that was intended to be an overkill excessively complicated game, you start adding in more and more details, and then the game becomes unworkable. And so you want elegance and you want playability you're always balancing you know, accuracy and playability our accuracy and simplicity. Phil Saban makes us use a slightly different terms a sort of core part of his his book on on designing wargames.

It needs to be playable. It needs to be accessible, particularly given particular audiences. It needs to be elegant and you want it to be accurate, but those things will often come at the expense at the expense of each other plagiarize. There are lots of really clever game mechanics out there and you may be able to adapt them to your own use the one I don't mean plagiarize here, by the way in the sort that gets you an F on your assignment. It's just that don't reinvent wheels if there are really good wheels out there that you can adapt. The challenge with plagiarize is, ironically, some some SPI products rather exemplified this is the tendency to get so attached to a game system that you keep using it over and over again, even though it's the wrong game system. And this can be a problem with the gamers amongst us because we have games we love and then people say, Oh, well let's do it this way. And it's because they're

attached to the game system. They're not really thinking through whether the game system is appropriate for the model. So put an asterisk at the end of plagiarize that should be plagiarize appropriately and possibly with due credit as well. But there is a lot of really good stuff out there that can be inspiration and that's one of the values as a neophyte game designer in just playing a lot of games. Because you think, Oh, that's a cool mechanism. That's a cool mechanism. Then this.

So you've got your sort of first prototype, you sort of built your game loop your game systems, and you have to do this over and over and over again, you try to break your game and then you fix it, then you try to break it and you try to fix it and hopefully the you'll get closer and closer and closer but sometimes you will find that something's not fixable and you have to replace it in a major way or drop it or or what have you. The biggest problem and I know that Tom will mention this because he always mentioned that is that people do not do this early enough. You want to prototype something rough and start playing around with it really early on and I absolutely need to have bits of stuff in front of me bits and bobs. When Tom and I are discussing game we literally start playing around with whatever is on the table. I used to design a lot of games with Gary Miller, I think when he was at the World Bank still and we would only ever go to coffee shops in Washington DC that had the sugar and little packages because as we were discussing a game we would always have to use the sugar packages to start laying out what it would look like. And we have walked out of coffee shops who realized they had sugar shakers instead of packages because we were incapable of designing the game. If we didn't have things we could put in front of us and start working out the game loop so you have to do this over and over. And over again. Now this is a slide I should have by students and realize that all of you are our undergraduate students. And Tom has a another version of it.

Because of course students always leave research papers till the very end. They kind of do some research and then there's that sudden crunch at the end to write the paper. When you're doing a game design. It's the other way around. You're the front end, load the work and you've got to get that prototype up and running that alpha up and running. And then you do the play test, change, play test, change, play test change. If you're fortunate that line slopes down, but you cannot leave it to the last minute you need to you need to make your game model break your game model and do this. Do this repeatedly. So I will end my comments there. And I will hand over to Tom to talk about how he does it and what a perfect way for you to and your portion because that's a we didn't coordinate this by the way. So this is this is supposed to show that we're we're mindmeld it's someone that we've known each other so long and I've shared so much dungeon time together.

Tom Fisher 07:59:42

On that being said, the greatest way into a career in game design is playing Dungeons and Dragons with Rex Bryden that's all I'm gonna say and then maybe the up and comers can take the rest from there.

As Rex was just describing right here and now and what you will find out because we're forcing you into it in the game design challenge is the game brief is what will make or break you now as

somebody who does this for a living now it is absolutely fundamental. And when I brought Stefanie on, coming out of Rex's core, so she had a great, a great background. Then I pushed her into this by forcing her to create what I called Game Design 101 Literally 101 games but it turned into 126 I think it was in 15 minutes to half an hour and then we would rip it apart.

There is a great play test journal that is available in the market now that I would suggest to anybody and it's called Fail Faster. Because the whole purpose of developing or that will that will allow you to get a product to the market that is solid is to fail in that game as quickly as possible. You might think you have the absolute perfect mechanic and nobody understands it. Or as Rex was saying gets far too complicated.

But the more that you can front load and get yourself to testing and I quite literally go by the 15 Minute principle. From the point of we finished the game design brief answering those questions that I refer to as the nine questions. who what where when why how much how many how often, and I always come come back to those and we've decided a game is required decided what type of game is required. sketch it and that's where post it notes, markers and little bits because lord knows my house much to the chagrin of my fiance is absolutely filled to the brim with game bits. You pull those out within 15 minutes, you can be ready to start playtesting the logic of your game and you don't need to know all of the absolute little bits and pieces and all of the detail. But when you test that early, then you are in a far better position to actually produce something that people will use. So it really is as simple as think of an idea for the game that you're developing, and try to figure out what's wrong and fix it. And this is the cycle and it's constantly ideation testing, refining and then feedback. Both the feedback loop internally and this is where diversity and inclusion is a profit point because I could absolutely believe in my head that this is an absolutely great idea. But unless I'm of the market of one it might not be it might not be valid. And so getting to that point as absolutely quickly as possible, is fundamental to to what it is that that you're doing. Now. There's a whole lot of complexity that goes in behind this that only comes with time. And I don't mean time reading about it and thinking about it. I mean time actually designing in a very short order. of time. We developed Stefanie skills through that design 101 process of daily game design to the point where she was able to turn around one of those games which is something that Global Affairs Canada is going to be using other games that have proved proven to be the basis or pieces of those games, the basis for other games that we've developed. And very quickly you can get to the point where you are now competent and able to able to drive forward and it's only through that repetition, you know much as the game design processes, idea test, refine, developing a skill is very is very much that test your skills, tear apart your skills, understand what is rubbish and then be able to next time develop all the better and the best game designers will continually go through this through this process. And what you really have to think about when you've answered those those questions, right? A game is that combination that coming together of cognition, the logical side engagement, which is the where the magic is, if you will, getting a player involved in the game to where they want to participate and feel that agency which is absolutely supreme, because if a player is doing something, and there's no real effect it's not a game. Whether it's a negative effect or a positive effect, you need to have some sort of effect and as Rex was saying that can happen afterwards where you realize what's going on but there has to be some kind of

agency in there. And then the interface that you have to ensure that the interface is not getting in your way. B that the interface is enhancing the experience and it is absolutely remarkable.

If you put a sticker on a token in front of somebody that that can be transformative into what it is that they are doing in the game and big exclamation mark. That can also be a danger point because if you give somebody a hammer, they're going to be looking for a nail. If you give somebody a little token that's got a sticker of a tank on it, they're gonna want to shoot something. So you have to make sure that all of the bits if you will are appropriate to the game and whatever you decide.

You know, the ideal games really come from furthering and getting into a little more detail of the of that Venn diagram before to really considering how theme the setting of the game comes together. With the components and the the UI the user interface of the game how you interact with the game with the players and you can not ever forget the players because if they are missing from your from your equation or from your build, you will not have truly a game but you will have a model that could just be run in the background on a computer, which you know is perfectly appropriate for some analytical considerations. But the player must remain central to what it is that you're thinking. And then making sure that the rules in there to ensure the interactivity that it is appropriately complex to model the situation so that you really deliver that absolute impact and again, reflecting especially in game design, 101 steal, steal, steal. When you're walking into a scenario where you have 15 minutes to design a game, you are not going to come up with a completely novel mechanic. So in the interim as you're designing your tidbits and anyone who's who's done any sort of object oriented programming, will think this way. Think of every decision or every node, or every piece of the story of a game as its own little black box. And each of those can be a placeholder where you're putting in a mechanic whether that's okay. I'm going to decide this for right now based on a die roll because I don't know what else to put in there. As you are developing. Then great you can develop that later develop that later on, but in that very first iteration to test your overall logic that you want to get to immediately plug something in and it doesn't have to be perfect yet and never be married to any one thing.

Everything in your mind as a game designer should be mutable because you have to consider that your bias could be playing such a role in what it is that is going on. That you could completely muck up the scenario.

So your toolbox really, really really comes down to those little tidbits and if you don't have game bits, nothing is better than post it notes. And that's why Stefanie and I especially during during COVID will use mural and we're literally playing with with posts and then we move on to bringing icons in and then dragging in pictures from from Google and different images, maps, whatever it is that we need.

And that is a fundamental part of your of your develop, develop, being able to move things around and play when we get past COVID entirely. Well, you know, our secret is Stef and I will

spend an awful lot of time at McKinsey Irish Pub. And we have a room that is reserved to us that is effectively our conference room and we will have games that are that are laid out right there in front of us because when you start the moving around, you are better able to see what it is that is going on. And that is an absolutely fundamental piece of the of the puzzle. And as you are asking yourself the questions about every piece of the puzzle and you run into the problem, always come back to those questions. And when you do a an in depth design brief, the rest of it will become far far, far easier because if you're stuck, then not knowing the the answers to these questions not having it done upfront. There's a delay in your process. Now in the case of design 101 as we are moving forward. If you don't know the answer, make the answer. And to a certain degree, there's a difference between an entertainment game versus a serious game where a serious game you will have a a sponsor or client who has a definite need or want in mind. That may not be 100% accurate, but you will discover that in a good design brief period. But then you can inject your own when it is more of an entertainment game as the saying okay, this is what I want to target. This is what I want to target and those are the questions that you should be be answering and focus very much on after you front loaded. Made sure you have player agency.

Then make sure that the experience lends itself to what you are trying to represent and so have your setup of the game in a very literal sense. That is your setting. Have your endpoint or denouement these are the outputs that you want. And this is what you want to achieve not necessarily exactly the the path or the exact pieces of data that are coming out but the the way that you want the outputs to come out. And then you work on the inside and the flow and the flow chart in a very literal sense of the story itself. What RX refers to as the game loop because this is where the player this is where the player lives and they are going through turns and these turns can change somewhat. But this is where now you've got the beginning you've got the end. Now you are far better position to know how to get your flow from A to B. Now I am just going to stop sharing for a moment and flip over to one of the games that Stef had designed as part of her design 101 which was a game that was called propose a for those of you who don't know what people Z in Quebec isn't that people Z or beneficia which is effectively an orderly an aide in this case in a long term care facility.

So Stefanie went through the process and keeping in mind this is very early on in her career right. But she's now getting into the flow of what it is that is that is going on in terms of developing the serious side of the game and started answering these questions so very much. The client is nursing schools in the who, who the intended players are going to be nursing students. So right away you frame things so that you know roughly a general demographic, probably not normally serious game players so you cannot frame things as a hyper complex SPI game or something the like like a twilight Imperium that's going to take eight hours to play. Orderly teams will be playing in pairs nurses will be represented as well as residents being represented. So already by answering these questions, you're starting to formulate an idea in your head of Okay.

Since I have these players, you know, where is all of this going to take place? Well, okay, obviously, I think I need some kind of representation of a hospital ward or some kind of long

term care facility residents Ward and these pictures will come up so right away as soon as that happens. Find yourself a blueprint or ever sketch something out very quickly. And bring it into your into your whiteboard, whether literal or virtual. Answering questions like where this takes place in terms of a legal structure of Canada under the auspices of COVID. How are you going to represent this resources are by their very nature going to be very, very limited. So how do you start building that in and already experienced game designers will have an idea of okay, I already have an idea of mechanics that I can put in. But even inexperienced game designers who are just new to this will start asking themselves the question, okay.

Let's say I'm using Lego bricks to represent what it is that I want in the game and these are representative of diapers. Well, maybe I have fewer diapers and you're starting to answer these questions for for yourself right there.

And so then what we've done, and what Stef has done is started stepping into a process of okay, I'm going to start mapping things out.

I'm bringing in a map of a of a long term care facility Ward. I'm going to start diagramming the flow of the way I think a turn would operate. So turn one. I have X number of residents that I have to deal with and X number of players or proposes who are going to be dealing with them. So we haven't even gotten into mechanics yet. But we're starting to think about the flow of how do I represent this and this is the model without getting into directly without getting into card play. But now we're now things are taking shape. And from this as you things are taking shape, and in this case, you can think of each posted as a process. You can later on then put in your stochastic mechanisms or game user interface or user experience component into that. So that you have your measuring tool in terms of a display.

So it becomes very clear if you will in a nursing ward. If you were to put a really big red angry icon over a room, you're going to automatically know that oh, I've got a problem in room number three, the resident there or the patient there is probably anger. And by moving things around and stepping through your flowchart, you will immediately get a feel of how the game can flow and right away. You will notice if there is a glaring problem and then through iteration, then you can start adding in more and more.

So what you've done with the flowchart is you're building the skeleton, and you're trying to simplify that as much as possible. So you have the bare bones in a literal sense, and then testing that and you say okay, this is solid, then you can start adding other pieces. If you need to answer further questions or or put in additional complexity to reflect what the situation you're trying to model is. So you're going very much from design brief at the very beginning, where you're answering questions and then reflecting on the answers to those questions. What do I need what is going to help me with my aide memoire? Do I need a map what kind of components sketching these things down on post? It's brainstorming these things. And the best brainstorms are done silently on posted notes with only one person who is speaking who is actually reading these without any kind of judgment because even the most inexperienced people will come up with the most brilliant ideas or inspire the most brilliant ideas. Get that

into your skeletal framework. Play it immediately. And it doesn't have to have dice, but move things around. And in that moving you'll see oh, yeah, you know what this piece does? Not work. I have to think about a different way to do that. Revisit, recreate that skeleton until there's something solid and then you can step forward and forward and forward.

For us, that takes place after the design brief within the first 15 minutes, because then you can really get a focus on okay, then my next steps should be this. And then you can decide, okay, if I've gotten to this point, then in between turns, what do I need to do? And so it's constantly this iterative process. Always the ideation, the testing and the refinement and on and on and on, until you get that solid piece that you're confident to move forward to and as early as possible then also involve other people and bring them in because every opinion is a reflection of what some player is going to bring to the table. And then you will have a far better idea of what you can and cannot do.

And with that, I think we have just a couple minutes left. And before we throw anyone into the into the wilds probably a good time to have questions.

Stefanie Game 08:20:51

Yes, so there's about seven minutes left in the session since we did push it 10 minutes due to earlier the earlier delay so if anyone has questions, feel free to put your hand up or type it in the chat and we can get a bit of a discussion going.

Tom Fisher 8:21:06

Or as I like to call it free advice to Yes, X.

Unknown Speaker 08:21:15

Can you hear me I guess I hope so. This question I think it was you Rex dimension that during? During the design it's also important to realize what do you want to measure or how what kind of information or data that you want to gather from, from the game or for or from the participants to have an understanding on how they arrived to certain decisions. Can you elaborate a bit more what kinds of instruments for example or mechanisms could be used for for that?

Rex Brynen 08:21:46

It depends how your players are interacting. So in certain forms of digital interaction, you can capture virtually all of the communication so you could automatically record it you have access to their text chat. If players are playing in person, people are capable of multitasking communication in person remarkably, so they're talking to someone they're half listening to another conversation. They're using body language. And the presence of the observer. First of all observer can't take notes quickly enough. Secondly, the act of note taking distorts the conversation. Because as soon as you say something, if you say something interesting and someone starts furiously writing it down, it's problematic. Cameras can be used, but they won't they may miss stuff. And often, games will have a quite vibrant game space where people are moving around, they're going to different areas there. There's a lot of people here and so forth.

And those games can be very hard to capture any information at all. And as I said, you cannot rely upon information and the hot wash or the after action review at the end of the game to reflect their mental states. And so the example used is we ran a game called Dire Straits we run it both at McGill and we ran it in support the connections UK conference, and players were asked at least the intelligence player on each turn what each team was asked what are the major threats to you in this turn, and it was striking how what they felt at the end were the major threats to their actor were not necessarily the ones they put on their list earlier. There's an anchoring effect where you remember the most recent thing or the most recent threat most severely and had we not been collecting data on what they thought in turns two or three. A discussion with them at the end of the game would have been funded fundamentally misleading.

So, so there are a lot you have to you have to pre think of those issues you have to think do I need to modify my game mechanics we had a problem the first time we ran dire straits that we weren't always getting the paperwork in on time. And people were filling it out later which defined the entire purpose of having it filled out live. When we ran it at McGill. They got a tiny bonus card when they submitted it in the correct turn was didn't have a lot of game effect. It was a minor intelligence bonus. But boy did everyone fill them out on time. When they ran up to us, they handed them in they had to get them in before the turn ended in order to get the slight advantage. And so we actually tweaked the game mechanic in order to generate more data that we wanted to we wanted to have, so you can't just leave it to the end. You can't just decide if data collection is important. You can't just design the game and then think about data collection you should be thinking it as you go along because some mechanisms may be better supporting your analytical objectives than others. Yeah, if I can throw it in there the you know, a tabletop experience or analog game, you know, lends itself certainly more to, you know, your qualitative data, right? And qualitative data is really hard to capture on an ongoing basis.

Tom Fisher 08:24:50

Some of the things that we've done, you can run things in a hybrid manner and very much as we're doing here, where we're capturing using a tool called otter AI, the discussions that are going back and forth. Then afterwards you can you know, parse the parse the information, have things timestamp, figure out exactly what is coming up more often than not very difficult to do under when you have many, many channels going on. And as Rick said, the great thing about face to face is that you can be involved in so many conversations at the same time.

And it is virtually impossible to capture all of that, right. And if you were to stop people in the midst of then you are breaking the game dynamic and so could be having a quite negative effect in terms of the way that the game drives forward. So back to what Rex was saying at the very beginning is a game the best way to accomplish what you're trying to accomplish because it does inject its own particular problems right that they're just saying some things that can't be done.

Stefanie Game 08:26:09

Great answers. Thank you. Um, so X, in the chat, I think asked this question before X put his hand up. So I'm just gonna address that first. Could you please give us some examples of mechanisms used in this game? The bits? Can you clarify which game just so that we know where to direct the question... the one presented by Tom, mine. Okay. Um, so I'll answer this one kind of quickly then.

The game is based on my experience working in long term care facilities at the beginning of COVID. So a lot of the restraints were resources and were time. So it kind of became a combination of worker placement resource management game in which in which we had a time wheel so it's a circle broken up into wedges, in which for at five minute increments, you would kind of allocate, okay, I'm going to do this task for this five minutes. I'm going to do this task for this five minutes but a lot of coordination needed to happen between within the team because some tasks required a specific amount of time to be set aside and you needed both people to be doing it. Other things took less time and only needed one person.

And then there was also we incorporated a checklist like a to do list almost of you need to accomplish this once for every resident that's there. You need to accomplish this once for every resident that's there. We used cards for emergencies that came up like if a resident fell or if a resident had a request if a resident that was non mobile needed you to get something from a shelf across the room that they couldn't get themselves. Those are all things that on a daily basis as a as orderly as a proposal you're dealing with. And so it was really being able to manage, you have to do one of each of these things for every resident in your shift that was eight hours. But then you also have to deal with the emergencies that come up because if someone presses their button, and a red light comes up, you don't know until you get there if it's an emergency or not. So you have to go to every single emergency that comes up in case it is something that you really need to affect. So we used cards. There was the board we also did the resources like Tom showed. So being able to track the the expenditure of resources was also something that we use, there's a lot more so I can talk about it a bit later like in the networking if if you want more information on it. And X, your question.

Unknown Speaker 08:28:14

Yeah, thank you for the details on that. I was actually curious how you came up with that model as well. But I guess more generally, like how can we talk and can have questions about how do you do the research component event? How do you know that if you're doing a game about a potentially contentious topic, to pick a reason why I'm at the protests in Ottawa, how do you know that the the mechanics that you are constructing reflects what is happening sort of in this in the domain?

Rex Brynen 08:29:21

Let me take a stab at that because when we did outbreak ready, we had both the advantage and in some ways the challenge of having maybe 40 Subject Matter Experts engaged in it, you know, epidemiologists logisticians, people who were experts in water and sanitation eccentrics, etc. It was really problematic because not all of them have gained brains, meaning they can't necessarily see how their jobs translate into a game. And they all have they all think that their

partner older, many of them think their part of the puzzle is the most important part of the puzzle, because that's professionally what they do. So if you're a nutrition person it's all about nutrition. If you're a risk communication person are all about risk. It proved very difficult to get from them a story arc. So what we did is we said and a best a best route for that story arc so we asked them, What is this stuff that goes wrong? Give us examples of mistakes, errors, traps that are commonly made and why are they made so we harvested from them worst practices ironically, now our core design team.

Of the half dozen people in the core design team. I was the only person with game design experience. The rest were frontline humanitarian workers are epidemiologists so that the core game design came actually had quite a lot of knowledge on it. So we harvested in a set vignettes from this broader audience. We then wrote through the storyline, we scripted stuff, we made the script available to all the SMEs to comment on some did a terrific job, some probably didn't look at it. And then we brought them and other people into the cycle of play testing. So more play test groups included people it was a challenge, and it would have been easier to have less consultation. Might have actually led to a better game in some regards, because I think that 90% of the knowledge is actually in the core core group in some ways. But the other problem is this was being designed for coalition. So it was saved to children. It was Johns Hopkins, it was a bunch of smaller NGOs it had to be suitable. For the donor which was USA IID. So and it had to not contribute adversely to the functioning of the overall project 95% of which is not about games. It's about teaching infectious disease outbreak in humanitarian settings. So you didn't want to burn any bridges designing the game which is only a tiny part of what the ready initiative does. I'm working right now, as was mentioned in the intro, the World Health Organization on their sort of games based learning. And I think that's very much going to the model of having sort of concentric circles, a chord game design team that's engaged a lot and is making a lot of decisions and then sort of broader consultative groups to harvest information. Again, we have the advantage that the core design team includes people who do games but it also includes people who who are public health experts for a living and I think that you know, when when you are modeling something, but and I'll you know, I'll throw this in as a little you know, a little bonus piece, the best way to learn about something is to create a game about it. First off, so thank you, World Bank for having hired me to create an anti money laundering game because there is no better way to learn how to launder money as this is being recorded, but asterisk. I remain on the good side of the law.

Tom Fisher 08:33:54

You know, and but part of what you want to do also you know, in creating that particular game, research research, but then that game was also stolen, if you will, from a real life case, because then you can go back and reflect on okay, this is exactly what happened. And then based on that there are natural nodes that come up. And then you can say, Okay, here's the what if, you know, so what if this had happened? So if you're talking about the, you know, the, the cardboard, there will be certain nodes that you can draw out of the you know, the factual side of the story as to this is the timeline of the way things occurred. This is the way each piece of the puzzle reacted to what happened. And then each of those points can be then for you a what if Okay, what if this had happened? What if that had happened?

Now, again, depending on how serious the game is, in terms of what kind of outputs you're doing, is this to be used as a reflection on the response of Ottawa police or is this a oh, this is a fun mega game. Let's see what would happen you know, the the agency that's in there in terms of determining what you do is going to be quite quite a bit looser or very much tighter. But when you base it on something, you know, again, that stealing idea of give me something concrete is the foundation to build off of that then you can be in a lot better position when it's not something that inherently is your area of expertise.

Stefanie Game 08:34:39

Fantastic answers. Thank you very much.

Thank you, everyone, for your amazing questions. We'll leave space and then networking for the conversation to continue because I know picking Rex's and Tom's brains about game design as always, is always a fun one.

We are going to take a 10 minute break or 12 minute break now. So we'll come back at 1240 Eastern, so 40 After where you are and we will get to the Game Design Challenge which I will explain after the break when we all come back. If you haven't signed up, we'll put the signup link again in the chat. If you choose to not sign up to be on a team that's fine too. We'll do kind of a crowdsource Game Design Challenge. In the main room for those that are not on a specific team.

Design Challenge

Stefanie Game 08:47:14

Okay, so for the design challenge, kind of as Tom briefly explained, I did I design 101 games and 101 days. That's the inspiration for this challenge.

You however, will not have 101 games or 101 days you will have an hour and one topic. The topics are pre assigned, the nine questions that Tom mentioned and Rex mentioned are already mostly answered for you. They're they're answered, parameters are given. But it's up to you to really decide how far you want to go with that. And if there's anything else that you want to introduce those of you that signed up. We have made for teams, three groups of three and one group before. So in a few minutes, I'll open the rooms and you'll get a request to join that room. Those of you that didn't sign up for one, I will run a crowdsource game design in the main room so we can do that together.

Essentially, you will have an hour to design this game with your group. If you have a lot of experience with game design try not to be overpowering in in your group. Most of the people are beginners and this is why we asked in the in the sign up what your familiarity with serious game is so that we can kind of mix groups up so we can have some experts some beginners have a variety of different backgrounds in each group. So we really are preaching what we practicing what we preach, and that diverse groups will come up with amazing things. Um, we

will have Tom Fisher and Tom Milat go around the groups just making sure everyone's kind of you know, going in the right direction. Being able to answer questions making sure everyone's respecting the IRB has principles and all that and yeah, if you have any questions you feel free to also ask and discord if there isn't someone there or send us a message asking for us to send a mentor to you so that you can have your questions answered.

Once you get to your rooms, we'll send you the links for the mural that you'll be using that has your nine questions laid out. You can search for graphics and icons in there.

Try to have one to one turn able to walk through for us for the game showcase. And then myself Abby, Charlie, and we'll we'll be judging, quote unquote, based on how applicable the game that you designed is to to the intended audience because that's huge and creativity. playability. All of that will also be there.

So yeah, make sure that you can walk through one turn for us just so we can get a better understanding of your game. And this really highlights Tom's point on play test, play test play test, because you need to have some component there to be able to walk us through. So I will open the rooms now if y'all want to head there.

Game Showcase

Stefanie Game 10:07:51

How was everyone's experience based on like, thumbs up, thumbs down a little stressful? good overall. I see some thumbs up. Nice. I love it. How did we find the topics generally okay. I tried to pick some that were kind of a bit random. Some were more difficult than others firefighting bagel sounds like high school mascot. That sounds like an amazing high school mascot. I entirely that a bit random? Yes, definitely a bit random. Fun fact all of those games were games that I made. During my design 101 So you haven't done part of what I did. So we'll start with let's start with group two.

If someone from group two would like to be the designated speaker, maybe share your screen for your for your mural. And walk us through what your topic was and the process and walk us through a turn.

Tom Fisher 10:08:49

You know what Stef while while they're prepping? X has got a question up there and it's for you. How did you come up? With topics for your design 101.

Stefanie Game 10:08:58

Um, that's a very good question.

So before it was officially design 101 It was randomly every morning I would just pick a topic and design a game. So the 101 ended up being like 130 to 150 ish.

So that was just kind of, I would wake up and whatever I had read in the news the night before, or a random topic that had come up on my social media. I just kind of grabbed at random things. And then Tom said, come up with a list of 101 topics in you have like two days to come up. With this one weekend.

And at that point, it was desperation. I would see a commercial about dentistry and I was dentistry game. There we go. That's what it is. And it's it got very, very random very, very quickly. So there was no method it was just whatever I thought in the moment could be a game. A lot of them turned out horrendously. So I don't recommend doing that. But it was definitely interesting.

Tom Fisher 10:10:05

Hi, conversely, absolutely recommend that because well, I'm the one that tester with it. And here's the method to my madness. Forcing someone to well, this is born of a design one on one challenge, which in graphic design or arch is based around the idea of Okay, give me a logo. And now I want 101 iterations of this logo. And this has to be a logo that is based around x and you could say apple.

The first 50 are going to be really easy. You know, number one, I guarantee you everyone either pictured the Apple logo or pictured a literal apple, and that's what you draw. And then you go to the next one that must be different. And then you go to the next one that must be different and different and different. So you have a sliced apple, an apple with a bite out of it. An apple that has been you're seeing the the trend section, if you will of it. So you're seeing the sort of the starburst pattern. Now I challenge you to immediately think of what could number 51 be now once you get to the last 2080 through 100 Then you're really really searching but you're going deep, right because now you're thinking design and getting into the all you're really pulling from your creativity and number 101 Will I guarantee you be brilliant, and probably something that you would never thought of before no one else has thought of before and really pushes the boundaries. So having Stef think of the 101 topics at the very beginning.

By number 20 She's forgotten the next 81 But they're already there. And so she's forced to think back on those and now really push the creativity. Now we went through a period of time where Stef was creating simple but pretty damn brilliant.

And then we went through a month of suck, or this is horrid, and I had it the conversate because she was getting frustrated, had the conversation with her to say don't worry about it.

This is about failing. I want you to be bad because this is how you learn how to make good and then progressively better and better and better and better. And then you get your flow you find out what your career Wait where your creative flow is, if you will, and only by pushing those boundaries and again, the motto is failing faster. The faster you fail, the faster you learn, because it's a completely safe to fail environment. I would do this with a live customer project, but in terms of training and now you know now she's now She's a pro and now she's able to absorb the Okay, let's get into the really complex, complex subject matter and you know, to the

point a game that that she started developing as training being sold to Global Affairs Canada, a game that she started as training is being presented to NATO. And but it's only by doing and the iterations and not caring if it's bad, but learning when it is bad, that you get better. And because if you try to do it right the first time, then I guarantee you you have probably spent 10 times as much time as you needed to in order to try to get somewhere decent. And it's got to be about the volume of creating and Create, Create, Create.

And that's why I say in the first 15 minutes play test, because it'll tell you most of what you need to know as to whether it's good or bad.

Stefanie Game 10:14:24

Yep. And on that note group two, if one of you wants to take the big leap.

Unknown Speaker 10:15:49

Excellent. Let me just turn the light on. And here you can see my face I was gonna say I thought he was playing Batman there for a second beat the the dark.

I realize the the sun has just gone down here and in Stockholm. So it goes down very quickly when it does.

Thank you The so we came to a game that we we went through at least two iterations we So the theme maybe is the is the main thing here. So the theme was bees and bees in agriculture. And the impacts of bees in the importance of bees for the environment.

And we we started off with thinking about who the actors were well there's gonna be the bees, the main actors, there's going to be the farmers there's going to be something else we figured out well bee bees because maybe the farmers will be the same the main players because the big because the bees can then be seen as a resource and we can demonstrate the utility of the bees in a sense.

And we we came to a game. Feel free to jump in. Now if you've got your microphones working.

Unknown Speaker 10:17:09

the sort of game the game play as a as a hexagonal board that represents the other fields of the of the farmers the in terms of in terms of gameplay, the the three players if there's a farmer, they can choose to either pass either a fertilizer they fail to pesticides that have been dangerous to the bees, or they can use they can not use pesticides, which would then give a lower yield later on the game. But at the same time, not endanger the beers. And it's in terms of turn play gameplay. So step one is the farmers will choose to pesticide use pesticides are not pesticides on their fields. And they will do that by using tokens that they will place on top of this hexagonal shapes, they will place those facedown in the first step of the turn. Then in the second step of the term, the players will turn over their tokens to reveal whether or not they've chosen to use pesticides or not on that field.

And then we will score what what they actually have so they'll score a higher a higher reward if they use pesticides versus not pesticides, but with a certain number of caveats. So there is on the on the side of this board there is a be health scoring index. That said that hasn't been fully drawn out yet.

And so imagine that being sort of a ladder goes up to one to 10 that that shows the health of the of the beehive if the if the farmer so the farmer scores one point for every field within the range of Hive there's a field that can be colonized by the by the bees.

On top of that their score one point for every field that has a pesticide token on it and there's no points for not using for using not pesticides.

But there is a caveat here which is if a hive has more than three pesticides around it, then they don't spray anything at all.

And if the there's another condition under which the the beehive health then goes down one, the farmers have to maximize their yield at the same time. Not drive the beehive health down to zero which hit which point that the game ends and everyone's lost.

If, if a single player has not already achieved the the winning outcome that's about it in terms of a summary.

Unknown Speaker 10:19:58

I was fantastic. Thank you.

The I just want to mention that the initial board layout or thinking some kind of randomize thing, but we don't have a specific algorithm for it. Maybe like a Settlers of Catan style diagram that's being shown that shows three fields like the three farmers have different colors, and the fields are color coded according to their colors and the bees themselves the hives are randomly placed as well and they sort of pollinate like seven hex sort of radius around it or one hex radius seven accents

Stefanie Game 10:20:36

You see is we're taking this as you know, a learning moment for everybody right? Because for most people this is this is something new or there's, you know, a whole variety of game experiences here.

What was the most frustrating part for you in terms of this development and design challenge

Unknown Speaker 10:21:06

I can I can jump in there as I speak in the most but then others please please come in afterwards. For myself those this little bit of a white page problem at the beginning of just knowing not really knowing what to start against there's that as the base but what what do we

want? What is it we're trying to we're trying to show and then trying to develop the the or represent like the the nuances of the model versus just getting something that we can play. And then we had something that played but it didn't represent any of the values associated to be like, Wow, does this actually show the value of b is what I don't know. But that that process for me was a real sort of learning.

Quite aha moment of oh yes. Well, once you've got something then you can actually critically critique it and make it better.

I think there's a real danger though from this as my first time I've tried to do this but then getting stuck into a mechanism and not being able to get out of it.

Unknown Speaker 10:22:08

Yeah, I definitely agree with anything we got like stuck in one idea and then it was also we got involved not involved but we started to focus on like over complicating our game I think without even actually playing first.

Tom Fisher 10:22:33

Yeah, you know, and you know, you've both hit the nail right on the head. X would love to hear your perspective on that. Yeah, I completely agree with their their thoughts. Time limit is very, very short. X had some wonderful ideas that we just didn't have time to sort of explore that a completely different interpretation of the game. Yeah. And, you know, that's, that's part of the, you know, the process of doing this as team, the process of doing this as the virtual white sheet with just some of those questions answered. And, you know, X, I think you you know, you said it well right there, and it reflects the reason why, why you need to play test that early. And I mean, you know, pre pre pre pre prototype, test early, the very simplest of of concepts, because it will give you so much information. And, you know, you can have all the game design knowledge in the world. And you can still be completely and utterly wrong. And if you have spent so much time developing something that you you're convinced is bang on right. You can find out at the last moment if you haven't played tested, Oops, I missed something. And that's why, you know, 15 minutes, the 15 Minute Rule, get in there and play test, even if it's a small piece because you will, you will verify right then and there does this answer what it is that I need and the moment that you become a professional game designer is centered on that. That second, that moment in time, that you separate your ego from the game and are able to say you know what, this doesn't work. I throw it out and have no judgment on yourself about it. Because it's just you know what, this mechanic doesn't work. I'm letting it go. And you're not hanging on to that mechanic too long. You're ready to say, You know what, no, Move on, move on to the next and that's, and that's how you can produce and that's why, you know, all SPI hates to a certain degree will end up starting to look very similar and very and very much the same.

Sometimes it can be good other times like and with that.

Stefanie Game 10:25:06

If the group has any last minute reflections, please feel free to provide them otherwise we'll move on to another group and then any leftover time in the session, we can kind of revisit this and go back into deeper discussions. So group two any last? Any last comments?

Unknown Speaker 10:25:26

Just a thank you for this for this opportunity. What a great experience.

Unknown Speaker 10:25:31

Yeah, it's definitely a challenge. It's definitely hard to be able to remove yourself from it and do it as a first time it is really daunting to have a topic and not really know where to start, but that's how you start right just getting going is really important, but phenomenal job.

Next, I am randomly going to pick group four, group four gets to go next.

Unknown Speaker 10:26:30

So our challenge brief was here what you can see on the screen, young professionals entering government so they want we needed to have government reps, media platforms. I reclined is the government and they wanted to cover negotiation, diplomacy and conflict mediation in fictional country. So we created two fictional countries United America and Groot. This is set the year 2050 They find a diplomatic solution to a conflict and learn to deal with conflict in a non kinetic way. So we have five system of diplomatic action which are available to the players. There's red lines, eyes for five players over five turns and we want miscommunication. So what do we do? We created a scenario where United America is being hacked by the country AI hacking group located in group and obviously United America doesn't like that. But the hacking group, just you know, Victor, just keep doing what they do. They're hackers, they're, you know, hack the world free the gifts and all that stuff. So we have five player roles. We have five players here you can see players two and three are part of the United America team and all the green is united America. All the purple is group and we have two players on group four and five, one representing the diplomats and leadership etc. of the government and the other half representing the hacking group.

But we also have the media as a player so one player is focused on just being in the media versus playing as media. We have some rules here. Each day is a turn each turn is a day. UAE gets victory by ending the hacking attacks and group wins by getting the ability to continue to hacking without any kinetic conflict.

So all the other rules in there we'll get to as we go through this space, we have red lines I as you can see here.

Red lines for UAE will not tolerate hacks on the fifth day and they don't want to have 555 or greater lives. Last group wants to avoid economic sanctions or fees or more economic sanctions refused to turn over the hacking group and they don't want certain money to go down below that at that certain level. We have concessions here which aren't revealed to each side so UAE doesn't want any more deaths. They don't want it security they want they want security

guarantees, then the hacking they want to keep their tariffs alive. group wants to remove the tariffs, they want more money, and they of course want to stay in power.

So we have two quantitative elements quickly share with you we have deaths and money. We don't have taxes so I'm missing a joke there but you get it those are two quantitative things were tracking. Each turn starts with an event being revealed. The deaths are revealed as well per per day. Those deaths are are random between one and 200.

And after each time, actually well I'll go through each term with you here and we go through the loop so this is a high level way of thinking about our game. But we get down to it. The way this works is we have at the start of each turn and event is revealed the event can include anything from saying a you a can community UAE Corporation got hacked, that a large city has lost its entire 911 service response. And it can be also things like group is announcing no taxes on cryptocurrencies and so on and so forth. So events can really be anything impacting either country. Then each player or players two to five get to react and the way they react is by communicating the way they show the reaction and by communicating to the media what they'd like to say they have 20 minutes to do this. The media then shares what they found, but sorry, it's somehow select. There it goes. Meaning reveals it reveals what has been happening and updates people on what the state of the world is, we think is a rule for a facilitator in there to help with that process.

But then we go into an hour of open negotiated where the two sides could talk about anything they want to each other however they want up to them. But the important thing to note here is that we have three rooms physical or digital were one has you a room to has group. The third room is a neutral third party territory where they can meet if they so choose. But they cannot meet inside of each other's rooms. The media that player is constantly updating things. And this is a physical room we'd have at the front of the front of each room, a giant screen releasing media updates, media updates come out from the media, they could be anything that the media wants to share. The group can convince the media to say whatever group wants it to say. And same with UAE they're basically trying to get the media's attention and the media updates the news as it goes digital we would have say like a shared PowerPoint slide or somesuch that the players can all look at as they so desire. But of course, it's the news cycle. So there's going to be useless news and they're too like celeb celebrity gossip, and so on and so forth. So after they have their hour of negotiating, they reveal actions they have chosen. I'll show you the actions and emotionality about the actions right.

So there's possible actions that can happen.

Everything from announcing sanctions to authorize a kinetic strikes to producing more hacks. On each other to doing anything their heart's desire. We have a few here that we could use the as example actions. And of course the players can create their own actions. These are revealed the same time and we end the day the way we started the day. So they again react to what's occurred. And they inform the media on their releases that Ginza get gets released. And then day two starts with an event being revealed, which leads to them reacting, which leads to

knowledge about what's happening, then negotiate. They then decide what they're going to do. They then reveal they're going to do and it's through resided, repeat, on and on and on again. That's, that's all we got. Any questions, comments, concerns?

Stefanie Game 10:33:12

Nice. It makes sense. It really I feel like it really embodies the complexity of negotiation and diplomacy.

What was what was the hardest part of this for you guys? I know that this is a more abstract topic than the big game. So it will have different kind of challenges that come with it.

Unknown Speaker 10:33:56

I think all of us were trying to get way too complicated since we were we were running with the story. And not just focusing on the game. And then obviously the time crunch and then also how to like quantify some what things we should and shouldn't quantify like, in order to put pressure on players to act in different ways. But yeah, Jack, I don't know if you have anything to add. Yeah, same thing is just trying to keep keep it from getting too complicated and adding too many things. But it's actually a fun topic because it's you could take it in so many different directions as as we were finding out so it was just difficult than trying to hold back and say, Well, you know, we don't need to add that let's just maintain but the focus was teaching somebody how to negotiate without giving up the store, but under time pressure, and under information that's coming at them and those sorts of different ways that could completely abandon their game plan or their negotiation stances. So yeah, that that all makes a lot of sense.

Stefanie Game 10:35:11

That's exactly kind of my feelings. The first time I navigated waters like this I guess my my one question would be, or it's kind of a two parter. How do you win? And what happens if no one gives in anything at all, so you can't have an outright win? Has that been was that a topic of conversation?

Unknown Speaker 10:35:41

Yeah, so so there's a time period to this right, because the hackers are demanding that you either pay or they delete all your data or they let the ransomware go wild. So you only have five days to resolve that if you don't, then your entire 911 system stays down. So the impetus is for the for the negotiators. To try to come up with some kind of concession but what we also did is he introduced another pressure into the whole thing by allowing because politicians are politicians, let's say there's a politician that's running for re election. He doesn't want to wait for the negotiated so he tells us city or state pay the ransom. And that complicates the negotiations for the negotiators. But you lose the game if you don't solve the issue or get a concession within a five day period of time.

Stefanie Game 10:36:26

Okay, that's that's a good way to moderate that a bit is thing that everyone loses if you don't come up with some kind of concession, which generally is fairly realistic. So great job.

Unknown Speaker 10:36:42

I have a quick question if you don't mind. Yeah, of course. Well, first of all, is just like a really good job because I that flowchart was very impressive to simplify something so complicated, but I was a little bit curious about the media person like what they do to win or are they just there to sort of wreak havoc amongst the for others.

Unknown Speaker 10:36:55

There, there are white cells, so we decided to make them a white cell so that they can, you know, look, even if one side is really doing very well and it gives the white cell the ability to introduce something that completely up ends the negotiations and applies additional pressures to the tenant negotiators. So again, that reinforcing that whole learning thing that you could you could develop your you're this great plan that you're going to go in there and you think you're going to you're going to carry the day but something happens that affects your whole entire game plan. You got to think on the fly because you're about to meet with the negotiators.

Unknown Speaker 10:37:34

Thanks. Yeah, just to add to that, then that's good. I guess this concept of winning like, to me it's more interesting to lose this game than it is to win it because it's. But anyways, the media has a very interesting role in this particular setup we have because if you if you get played, if you will, by either side, you end up on that side or proceed to be on that side, which could derail the negotiations for both teams, henceforth, because that's the only way they can really communicate with each other is through the media. So if the media manipulates the message, then it's even harder for the either side to not lose. Whereas everyone can lose very easily in this one.

Unknown Speaker 10:38:23

So hit. I feel like if that's such a powerful lever in your game, that player needs to have an incentive of their own that they're trying to win rather than just being the kingmaker for one side or the other or making sure everybody loses.

Unknown Speaker 10:38:40

Yeah, it's also very automated. So we were we had the idea to automate some of the media actions. So even if that player just goes in, goes to the pub. The game will still continue without the media person. So what's the incentive for the media person to like, stick around play the game? Yeah, that's a shortcoming. But I think it'd be up to a facilitator to make sure that that person is okay. Taking that role and guess yeah, good call.

Unknown Speaker 10:39:10

Yeah, but media is like fun. I mean, I've seen in Tom mega games where you have a media team in and all they're doing is producing media. There's no objective measure of performance. They don't win.

Unknown Speaker 10:39:25

But it's not a zero sum game and you know, they they gain enjoyment from the game by well influencing it, digging out stories, you know, contributing to providing that they can. So you know, how they choose to do it can work.

Unknown Speaker 10:39:46

You don't have to have a score that says you've won if it's a professional game, you know?

Stefanie Game 10:39:55

Yeah. X is very right. Serious Games don't always have a winner or loser. A lot of times it's collective. It's about collective experience, more so than winning or losing. But winning and losing is definitely a good motivator to have people really give it their all.

I know if someone tells me that I'm in the process of losing the game. I work a lot harder to try to win.

Alrighty, so next we'll have group three.

Unknown Speaker 10:41:19

Okay, can you see it Yes, perfect. So I will start by saying that I'm probably the less qualify in the team I haven't wore I haven't walked at all in game design and just a casual player with a military background so it will even be difficult for me to explain. So please, the team members if you can help at one point, I will be great. So the theme was a it's a it's a it's a competition game. Based on bagels, Molly, and New York style beggars. So we did a little bit of research. It sounds like for Canadians the moral beggars better than than the American ones. If you want more details, it's it's on the it's on the we have links so the game is I think it's important.

The players are in jail. They are female prisoners.

And basically, the players have to select a strategy either New York or Miami style, beggars strategy. One is more qualitative, the other is more based on production. And they will have to play and they might I'm not sure maybe Paul can explain but they might collaborate at one point. So to give you an idea of the player area is here.

Okay, so you have two types of cards, marketing cards or production cards. And on your table, you have bagels that are produced and clients that are generated based on your strategy and the way you played. So the turn sequence is, is the following. At the very beginning of the game, you will have to select to pick up your strategy.

New York strategy is about generating more chi, more bagels and more realities about generating more clients.

So the sequence is defined as followed.

You pick up your strategy or let's say you pick up New York style strategy. The game can be played by four people, two players, select the New York style and to the Montreal style. The main idea is the strategy that attracts the most customers wins. But the player with the most money at the end, wins the game. So you pick up your strategy then you pick up five cards from a randomized deck here marketing cards or production cards. And we have also an Event deck where some events that could be global, national or local can increase or decrease your production or your marketing. For instance, if you pick up the hockey Morial event, you will have won more points for the generation of clients with a mobile strategy.

Unknown Speaker 10:45:14

In fact, if I may interrupt their for only one second, so we were thinking of events that could influence both production and customers.

There is one special marketing event which is sent on Fisher to a gaming conference which just increases the overall interest in Montreal bagels.

Unknown Speaker 10:45:39

You can continue on if you have your cards in hand, you discard the production garden it's a production account to produce a bagel or a marketing gulf. To attract the customer. If you discard two cards of the same family, during your turn, you will get a bonus and then you generate your tokens also either your beggars or your clients and you place them on the common area which is the table basically the beggars or the New York or the more on customers.

And at the end of the term, this is when I think it's maybe X can explain if you have a bigger forage customer you get an extra cab for the next time. And I X explain the the end of the game yeah, the cup.

Unknown Speaker 10:46:42

We talked about putting since this is part of a program to help the female prisoners you know kind of understand some general things about business and marketing and you know, sort of how a community works together. We wanted there to be a cooperative aspect to it with in the competition. So the idea was, we kind of looked initially we played around with kind of the San Juan card game and then and then move down from there with taking a couple of mechanics.

But part of this was that to show that the one of the two players that chose the same strategy had to work together to try to to create the customer base to their system. But then between the two players, there's a co op competition to create the most money and one of the ways to create that sort of it was almost sort of the competitive salary on the San Juan and a lot of Euro games. There's kind of a competitive solitaire aspect.

So the two players are working together to a certain extent, to have the dominant strategy but then they are the one that creates the engine that will do the best at matching view of the

economy of a buyer. If I have a lot of customers back to the bagels to give them that I'm not going to make money if I make too many bagels and don't have enough customers to sell them. I'm even inefficient. So the idea of you want to have a match of bagels to customers and then if you get that you get the bonus card. That gives you an advantage to since you discard cards to play cards, having more cards gives you more options.

Stefanie Game 10:48:53

So this is very thorough. I was very excited for this topic. Tom chose it he really wanted someone to make a make a game about the superiority of Montreal bagels in Tom's opinion.

Unknown Speaker 10:49:08

Just so everybody understands very clear not to fall into the trap of making the game about the bagels. The game was about business and let the best strategy prevail. Not the best bagel.

You will because we all know which one is the best bagel but you see this send out a poll now of what everyone thinks the best type of bagel is. This we did. We did. We did concede that the Montreal bagel was sort of the higher quality but then the fact that you could make the New York bagels faster and that you can attract their you can appeal to their sense of New York business to get their clientele to you know there's a it was you have to let it play out and random event you'll if if the if the Rangers come to town you know you're gonna sell more New York bagels then when the tabs come to town.

Um, I was wondering why you chose that the game was going to be played by female prison inmates.

Stefanie Game 10:50:23

Oh, he didn't have anything to do with that. So all of the criteria and all of the question answering was done by myself and my co chairs.

Tom simply just requested that at least one topic was about bagels and the difference between New York Montreal bagels Yeah, I think I didn't write the WHO for that for that topic. But I definitely think that when all of us were answering the questions, we kind of wanted to come up with some stuff that was simple and straightforward and other things that were just completely out of the blue and not something that anyone would be used. To doing. Because like how often are you asked to design a game for female inmates that are close to being released? Right? Like that's kind of uncommon.

Unknown Speaker 10:51:04

And they came up during the very early stage of the conversation. So what would be the implications of having female of having female prisoners? Play this and one of the things that was mentioned, for example, was the use of randomizers. So dices might not be allowed because they could also be used for gambling and their materials for example of the game that we said okay, let's just make it paper based. It's going to be only cards. So it came up. So it did play a role.

Stefanie Game 10:51:40

That's really good that that was considered that's a huge part like Tom and Rex said earlier in their talk that you know, considering who's actually playing the game, like who are you making the game for is such a huge part of game design because if you're making it, we had one topic that was for like six to eight year olds. And if you're if you're making a game for six to eight year olds, that needs to be comprehensible. For 60 year olds, no matter what your academic background is, or your perspective on the topic, it has to be digestible for your clients and for the participants.

Unknown Speaker 10:52:16

I found it very difficult. Yes, especially when we had to think about the victory points and how how will will be how the ranking will the scoring will be based at the end of the turn or the end of the game. Yeah, I'm not very familiar with economic game. So was an interesting discussion.

Stefanie Game 10:52:44

Yeah, what about the others, do either of you have any expectations? X, I know you're more of a war gamer. So it'd be really interesting to get your, your perspective as well.

Unknown Speaker 10:52:57

Well, you play the game night aspect of user one of my technique for CO opting to find out who in my organization where gamers was to have game night and we played a lot of euros style games, which led me to sort of, I always joked that Puerto Rico despite some of the potential baggage with you know, in any case is a good supply chain management game. So when this kind of became a marketing, supply chain management, the game start you know, we started putting a bunch of ideas out on sort of what the what elements we wanted to map into the game and then kind of look to is there a game out there that has some of these things?

So I and I, frankly, in a lot of the games I do professionally now, I found bringing Euro game work replacement mechanics to some extent, some car driven mechanics but not so much deck building but the idea of event event that was like pandemic where you take events you split the Event deck into sections and put a couple high impact events in each little portion of the depth and spread them out.

There's things like that, that I've taken that even in quote unquote professional Wargaming there's a lot of techniques you can bring from the hobby and even the Euro gaming community to figure on those problems. Good game came out good elegant game mechanics are hard to find and when you can kind of find some of them to put together it's bold. You can't just rule out in particular genre.

Stefanie Game 10:54:59

Yeah, X. What about you? What are your thoughts feelings?

Unknown Speaker 10:55:01

So for me, I think similar to what was said before the blank page at the beginning was a bit tricky. So we started just shooting darts at the wall.

But, so if I have to compare that to a baking metaphor, that's really just like dispersion of the dough. But at some point, it does start to become something more solid. So I think halfway through we really had a clear idea on well clear each idea on what did we want to get out of it? And then we actually started sort of overlapping a lot of the mechanisms from Puerto Rico. I think it was to do what we wanted to do, but then yeah, then it became a whole other game because it was like trimming, trimming out things like okay, we don't need that part. We don't need that part. We only need these two steps.

And then, by the end, we started realizing some of the gaps. It's like, you know what, we're really not dealing with the situation or when you actually get to this corner case. This is only like producing selling and that's it. You know, there is nothing interesting, nothing exciting, there is no tension. But it was a bit too late.

Because, you know, we're running out of time. So that Yeah, I think that the the lesson there was really don't know what just let's just finish this one. Try it out. See what happens and then we reformulate. So it I am thinking not so much as bagels as just making a lot of cupcakes and just like trying like, you know, try see what happens. Don't kill anyone. That's it.

Stefanie Game 10:56:48

So very good approach, not killing anyone in bagel game is generally the right direction.

Unknown Speaker 10:56:55

What about Dubai advanced to England version would point out the fact that you actually make your money off the coffee mat on the bagels or donuts. And there was a real light thing there where Krispy Kreme tried to come in to New England, at least Rhode Island and marketed that people like their doughnuts better than dunkin donuts. Donuts but they didn't realize nobody goes to Dunkin Donuts to buy donuts. They go to Dunkin Donuts to buy coffee. So, asymmetric strategy. You're going to win the bagel wars with coffee. That would be my advanced skill.

Stefanie Game 10:57:31

Well, there you go. You've already got a basis and now you can continue this and build off of it. And make something market it, sell it. There you go.

Tom Fisher 10:57:43

Sounds across the country. We'll be playing this game by next year. Exactly. You never know. That is how all good games start. A quick little design, sketch, play testing and then your run with it.

Stefanie Game 10:57:47

And with that, we'll have our last group come up and present their game I said come up as if we're in a room with a whiteboard to present at but you can unmute put your camera on, share

your screen. All that good stuff. I'm particularly excited for this topic. So we'll see what happens.

Unknown Speaker 10:58:35

So our our group was assigned a client that was an LGBT NGO that was tasked us to make a game about sort of evacuating refugees from another country that was in the midst of a civil war.

And it was specifically for for for players and focusing on sort of injected events and turn based structure. So we see so we started thinking about this as sort of the flow of refugees from this other country to the camp, and the game is supposed to be for for people that were managing the camp.

And one of the things we we talked about sort of early on was with the refugees coming in that they would have some sort of visible traits that people would would initially know about, but they would also have sort of non visible traits that we would also need to manage things that weren't immediately obvious.

And so the the game that we ended up putting together, sort of a card based game, where each player is responsible for a different step in this movement of refugees from the country to the camp.

Each player has a different responsibility along the way for making different types of decisions. And there's different information available to the players at different points in this process. So during the first turn, everyone is kind of making decisions a little bit independently. So you have one player who represents the the person at the border sort of picking people to evacuate from this country.

And they've got a deck of cards that gives them options about how many people they can accept during their turn. And they have a pool of refugee cards that on their face had sort of visible characteristics. And so sort of an example down here, where we have Maria, who's feminine presenting refugee of a specific ethnicity who's part of a family group.

Or we have Philippe who's masculine presenting from a different ethnic group, who's just there by themselves, right. So this player would have a pool of people they have to pick from based on whether you know, the example this first card says you may accept family of three or a band of nine refugees. So they have to make some decisions about how many people and who they're going to keep together or break for.

The second player represents sort of processing of the people. And they'll be limited in the number of cards, they can flip over. So they get to sort of sit down and interview refugees figure out what their needs are, and help us to slot them into different demographic categories.

The next player is dealing also as a deck of cards, but those decks are focused on things that come up during transportation. So transportation delays the opportunity to accept additional people from another NGO, or incidents that happened during transit.

And then the last player is sort of making policy decisions about the camp and how to expand it as more and more refugees are being sent over so they can sort of expand housing for different groups of people and make decisions about how people are split between those different accommodations.

So during the first turn, everyone's kind of making decisions a little bit independently, which sets them up to be in conflict. Maybe they're they're bringing too many people more people from the interview or more people than they can immediately accommodate.

And, in later turns the person making decisions for the camp and the person making decisions about how many people to accept are having to make those decisions first and sort of blind based on the information from previous turns and the players three and four in this case, are then making their decisions. So you have a bit of setup with friction.

Those initial decisions based on all the information and then sort of a resolution phase where you're seeing the people in transit right now with more up to date information. At the end of each turn, there's sort of a tabulation of how many people you've been able to successfully accommodate.

And how many people are not accommodated so players got some feedback on how well they're accomplishing their goal of accommodating these refugees.

That's about as far as we got.

Unknown Speaker 11:04:43

Very nice. I saw um, towards the right you had some challenges. It looks like and some things some considerations. I'll do want to just briefly go over those two because those seem a very important like the white post it's off screens are ones that are often yeah

Unknown Speaker 11:05:05

yeah, we were just taking notes in different areas, as we discussed. So we're trying to figure out sort of how to how to flowchart this and taking notes and different concerns.

How we wanted to score what the outcomes were for individual refugee is with what the scope of each turn represented, and which decisions were made sort of independently and, and in isolation by players and which decisions they could discuss or would happen more sequentially, where they have more information.

Stefanie Game 11:05:48

Yeah, makes sense. So for you and for the rest of your teammates, how was How was this challenge? How do you find it what the topic approaching it? What was the general kind of feelings towards it?

Unknown Speaker 11:06:06

So I'm at state something. So I think one of the key challenges you have too much going on your mind and you want to sort of put everything in proper order, which sort of delays you quite a bit. And later on creates challenges rather than starting simple, and then going through the iterations. And for me, it was very challenging. Make me feel like an outlier in the community.

Because if you if you read Malcolm Gladwell outlier book, it says that for a catastrophic event, there should be a couple of events occurred in a second that's, that's I think, what's happened here for me because I'm I'm totally beginner for this Wargaming and the tool is definitely new for me. I'm an old school guy who is who likes to work with posits. So I'm kind of paralyzed with the with these kinds of new things. So although I have kind of experience on these kind of things, the refugee issue because I'm coming from Turkey, and it's a major issue in in Turkey, so I kind of expressed but it's hard for me to, to put them in the mechanics of game design, but it's it's a safe environment to fail. So I I think I failed nicely. I learned a lot of things during this process.

Stefanie Game 11:07:52

Thank you. I think that this this design definitely plays a really interesting take on it. Coming from coming from looking at the at the NGO side of it and refugee processing and everything. I think that that's definitely a side that I know I haven't seen before. And it's it's definitely something that can be looked into more and evaluated more and represented. It is hard to represent in mechanics so I completely understand you're like the the frustration almost of not necessarily knowing which way to go from there. But I definitely wouldn't say that this was a failure, because you learned something and you put something down on paper and you got to network with other people internationally as well and like learn from each other. And that's what the whole design challenge and its soul is about for this. For me it was about coming up with as many games as possible, but this was definitely a platform for beginners to you know, kind of start to get your footing. Yes, Tom. I saw. I saw by your face you're gonna put your hand up. Yes. And it's funny because you know, so often we see failure right as a as a negative and failure is fundamental in education.

Unknown Speaker 11:09:16

Right? If if you are immediately good at math, and you get 100% on the math test, you haven't learned anything anyway. So you're not really learning because it's our it's already there. And it's funny because you know, socially, right, we believe that, again, failure is something inherently bad. Whereas especially as games are concerned, because you are, you know, a game is built and let's let's say let's take a war game, right a game is built to hone skills.

And a war game is built to test out possible tactics, strategies, operational concerns, to cause as much possible damage to the opponent, while suffering the least amount of damage yourself to the point that you want them to surrender, right?

It is better to fail in the game and learn from that than to do it in the field. Right and that's why exercise and that's why war game. And that's why we go through simulations of okay if I do this, I'm hitting so many bow but if I do this, if I poke my head out here, I'm gonna get shot. And and the analogy to learning game design is is directly right there because you want to learn through the the iterative process of yeah, this doesn't work, get the feedback, okay, what then does work and proceed that way. And then you know, not only are designs that much better, but as a designer, you you are that much better, that much faster, and I will guarantee you, Stef will say she learned more from that month of sucking horribly when she was grading those games than when she was creating the right game. You know, her first game was terrific that she made what did she learn from that? Nothing new because she'd already taken things from within her comfort zone and applied them. Right and we're asking you to go completely out of your comfort zone. And I know we had the conversation in group. And yet, when asked the question in a specific direction, you came up with something for the game that nobody else would have come up with, because of your experience. And like I said, boom, you're a game designer, because it's that piece and then you add a piece and add a piece and add a piece and there there's a reason that you know, again, my adage is fail faster, absolutely fail faster, because the faster you fail, the faster you make that near ideal product for your for your sponsor or for your customer and I say near ideal because nothing is perfect, right as far as that's concerned.

Stefanie Game 11:13:13

So I will say to that, especially with with awareness games, which this this kind of leans more towards an awareness game, to put players in the experience of having to say okay, I have so many people that I need to that I want to help, but you don't have the capacity to do it. So you then have to choose who gets help and who doesn't. And you're putting players in that kind of experience and like, like what Sally kind of touched on in both of her talks over this weekend. That narrative is a huge part of putting people into that position and getting them to understand the experiences of other people. And that is entirely what you did. And awareness games are really hard because they're usually more on sensitive topics. And I always go back to either my design one to one or Rex's class, but we designed an undocumented migration game in Rex's class.

And there were so many hard topics in it because it's an awareness game. Like how do you put your players who never would have experienced anything like this? And needing to like leave their home and everything that they know, how do you put people into that position in a respectful way, but also really emphasizing the reality of it, and it's a really hard thing to do. We struggled so much with it. I think eventually we kind of got it to a good sweet spot. But I know that after play tests, we had people saying, Wow, I had no idea about any of this. Like, I'm really aware of it now. And that's that's what the touchy topic games tend to do. When done well, so applauding to you. To all of you, everyone that participated in the design challenge us all did amazing.

Any other thoughts on design one on one feel free to just unmute and and go for it. I know I found it really stressful when I had to do it. X, yes, please go ahead.

Unknown Speaker 11:16:36

Also, our quick question. Maybe I have a question. Question is quick. Maybe the answer is long but could you talk more about being respectful when addressing one of these games that has like sensitive subject matter?

Stefanie Game 11:16:54

Um, yes. So we got a lot of our answers from connections North actually in the in terms of our class project. Because one thing that's really prominent and I know that if you want to also join me up here because this is our game.

One thing that was prominent is sexual assault. So that's obviously a very touchy topic. And very sensitive as well. And so it's really hard to, to find a way to include it in a way that's respectful and fully acknowledging the extent to which the migrants are affected by this while also remaining sensitive about it. Because the last thing you want to do is just not include it at all because that's silencing it and that's not good. But if you include it too much, it might put more of a focus on that as opposed to like the overall picture.

So what we did is any graphics related to it we kept vague we never directly depicted it in graphics. In terms of card content. We referred to it as I think the first iteration was sexual assault, the second iteration, just assault but we had it so that it affected more women than men, but male characters were still able to be affected by it and that kind of alluded more towards the sexual assault aspect of it.

Um, trigger warnings are also a way like brief, pre brief your players that there are going to be sensitive topics make sure kind of try to gauge the receptive receptivity of it. If it's a huge trigger for someone, you obviously want to kind of tone it down, more so having an adaptable way to use it and to have it be presented.

That's something I would say, Tom, maybe you've got more experience with that or Vic maybe you want to say something on it.

Victoria Aponte 11:19:36

Sure. Um, yes, it was very hard. Initially, we didn't know what to do. And I think also something that we did to try and make it a bit more like real I think, we put like long term consequences. So certain characters after they have been assaulted, they lost the ability to trust other players so they can receive help. So that also kept it it was still not super in your face, but it was still a reminder that this was a danger throughout the game. Yeah.

Tom Fisher 11:19:38

Yeah. And you know, I, I reflect so much. Always I come back to very much the same, the same basis points right. And those nine questions and this in particular, knowing your audience, right. We we delivered a game to the Montreal Institute of genocide studies. So obviously, we have to deal with genocide. issues, right. And these are people who are schooled in the material familiar with the material, and so you can be far more open about it for the discussion. This is not a discussion that I would have inside of a university class. Where, you know, let's say at McGill, many international students, you're not going to have the same type of discussion as you are with people who are, let's say, ready for it. So you know, so much comes down to knowing your audience. And the flip side of that coin, you know, we're involved with a project with the Canadian government that you know, deals with indigenous communities, various, you know, communities with which I do not have direct experience. So, the way you have to treat that very sensitively is a you know, either reach out to those communities, make sure you have some sort of representation or subject matter expertise on the the community on the topic, so that you yourself are coming or presenting this from an informed point of view. Because otherwise you know, a bias bias is everywhere, and you will always bring your own particular bias to any game design and you have to very consciously take note of those assumptions at any given point in time when designing and constantly question that and say, Okay, should I Who should I ask about this? So, you know, first and foremost like I said, know your audience when it's a matter of delivery, and when it's a matter of design, get that knowledge in there for that perspective, if you don't not already have it.