

Introduction

Hi, I am Thomas Grip and I am Creative Director at Frictional Games. I will talk about the self, presence and story-telling.

Frictional Games is probably best known for having created *Amnesia*, but we have been doing horror games for over 7 years now. I myself have been doing these kinds of games before that and have been at it for almost 15 years.

As the title of this talk suggests, it will be about story-telling and will therefore start off with what I consider a story to be.

Generally speaking one can say that a story is something dealing with at these elements.

- themes, the highly level concepts, love, betrayal and so on.
- settings, environment, back story.
- characters, beings that do things.
- plot, a string of predefined events.
- narration, how the story is told, jumps in time, unreliable narrator, stuff like that.

Any game that has a focus on this, is a game with story-telling. For instance, *Final Fantasy* is a game with story telling, but that *Tetris* is not.

Very important here is the story is *not* just the plot. It is also here that the interactive part comes in. There is not much interactive that can be done with plot other than choosing paths from time to time. But with character, setting and so on these are things that we can properly interact with! *Interactive* story-telling means we want the player to **PLAY** the story, not just passively observe it.

I also need to clarify another word that I will be using a lot. “Narrative”. What I mean when I say this is the final experience that the player has. Essentially how the player would retell is play-through to someone else. “I did this, then that and so on”

With all that out of the way, I hope that I will make the rest of the talk will be a bit clearer.

It might not be apparent at first glance, but horror games are very focused on interactive story-telling. By this I do not mean the plot of course, but that they thrive on evoking emotions, realizing a setting, discussing themes, etc, and fails as an experience if it does not do this properly. This has led to us to struggle with interactive storytelling for some time now, and the experience and research we have gathered lies as ground to this talk.

Now, for a very basic division of how stories in video-games are told.

The most common type of story telling technique in games is to have a few solid base mechanics. You then have a bunch of playable segments using these mechanics. But whenever the protagonist needs to do anything beside the gameplay foundation, you remove player control and enter some kind of cut scene.

The type here is a bit similar to the previous. Again, it starts off with a few very basic mechanics. You then let loose the player in an open world with scattered quests. Here most storytelling is through the generic missions, which have some kind of exposition to them.

In both of these the players spend most their time repeating the basic mechanics. For games this is

almost always jumping, shooting and hitting stuff.

If we try and move away from these kinds of story-telling, games tend to up removing all of the dynamic game-play flow and interaction happens at a much higher level. You tell the character to go there, chose from a list of actions and so forth. All of these actions are very discrete and lack the flow that you can see in these other types of games. Steering around Nathan Drake shooting bad guys is very different from how you control Guybrush in Monkey Island. However, all of these fluent games are all about combat; they lack the range of actions that can be done in Monkey Island.

Looking at the history of these fluent games, we see that that the story-telling has remained very similar. Uncharted use pretty much the same some kind of technique that Another World did, and Skyrim is not all that different from a game like Ultima. This is quite a long time-span with very little change in how stories are told. There are tons of stuff that has gotten better here of course, but the basic story-telling structure is essentially the same. What is holding it back? Why can we not have this fluency of control encompass more actions and last through the entire game?

The problem lies in how we design the vast majority of our games. The core is a black box, a system unknown to the player. Gameplay boils down to intuitively figuring out and mastering this box. I will refer to this as “black-box design” throughout the lecture. Designing a game like this is about constructing the black-box: to come up with game-play mechanics that help the player interact with it.

When constructing gameplay for this approach feedback is required to make mastery and intuitive understanding possible. There is all sorts of things to keep in mind to makes this work, and it all put limits on the actions players can do.

Also, black-box design encourages an optimization type of play-style. Choices made are based on the mechanical gain, not on any emotional attachment. For instance you pick a character based on stats instead your feelings towards her. This means that in order to have good story-telling, optimization tactics must be close to their emotional value. This further reduces actions possible.

And there you pretty much have the sole reason why games end up they way they are. Unless you do something abstract, these limitations make it hard to come up with good blackbox mechanics besides combat and movement.

Presenting an alternative to this black-box design is what the remainder of this talk will be about!

My hope is to that the approach will allow games that has a multitude of actions, but still has flow and can be PLAYED all the way through.

A Sense of Self

Before discussing the actual theory, we must begin with the human mind. This part will include a lot of neurology, some physics and bit of philosophy but I promise we will come to video games in a bit!

It is very easy to think that what makes up your self is a fixed entity that is not possible to change. The reality is quite the opposite; what you consider as your self is highly malleable. There is a great experiment that show how this works.

What you need to do this is a **hammer and rubber hand**..

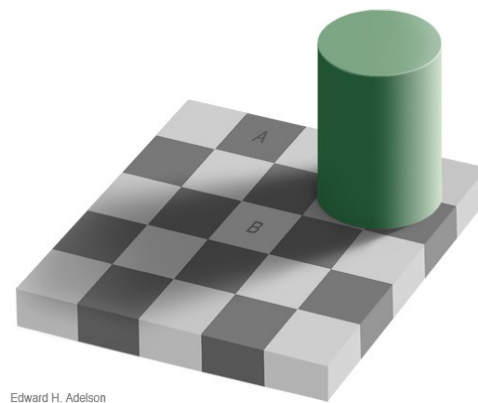
You place the rubber hand in front of the subject and block their real hand from view. You then stroke the rubber hand and the real one in the same place. After a while the subject will feel as if the rubber hand is their own. You can then test this by then taking the hammer and hit the rubber hand with it. This will cause the subject to pull back their real hand, as if you were striking their own limb. You can also test this a bit more subtly by measuring the galvanic skin response, palm sweat basically, when threatening the rubber hand with a knife or similar. This will produce a response as if the real limb was being threatened.

What happens here is that the continuous stroking of the real finger and the rubber one changes the subject's body image. This to the extent that even an unconscious action of pulling away from danger happens with this new sense of self. What makes this possible is this repeated feedback loop that is created by feeling the stroke and seeing where the stroke is being made. If you stop stroking, the illusion quickly fades away. This shows how what we believe to be ourselves can be changed, and that it is the current state of perception that matters.

The same technique has been used to transport the person's sense of self to all matter of things. A crazy Swedish scientist has transferred people into dolls, allowed body switching, induce out-of-body-experiences, etc. All this has been done with a similar feedback-loop of a tactile and a visual sensation. In all of these experiments, a constant feedback loop is required.

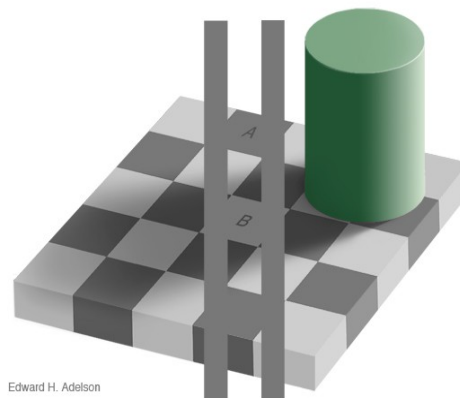
There are even more far out examples of this, such as people that loose their sense of self completely after a brain damage. There are even clinical reports of people who have denied that they exist all.

This sound to sounds a bit strange, and seem to go against our everyday experience. But it is no different from our perception of the outside world. We tend to believe that we see reality as-is. But what we feel is this lush and colorful world, is just whatever scattered light waves that happens to be collected by small, movable holes in our skull.



Edward H. Adelson

It actually is worse than that. The light that reaches our eye is not what we experience. This illusion is a great example of this. It defies belief but squares A and B are exactly the same shade. Don't believe me?



Edward H. Adelson

See now? It is really hard to think we are deceived this way, and it is scary that we cannot unsee it either. This happens with everything that we perceive though! No perception is raw, it is all shaped and molded before we experience.

There are no colors, smells, shapes or textures “out there”. It is all just a convenient way for our brains to process the information at hand.

In the same way, our own sense of self is also made-up. What we feel as “living in reality” is just our constructed virtual selves in a virtual world. What makes it all “real”, and not just an hallucination, is this feedback-loop that support what we see. If I kick I rock (which a really stupid thing to do, but bare with me) my foot stops moving and it hurts. Thus rock exist and the pain I am feeling is not imaginary. But has we have seen with the rubber hand experiment this feedback-loop can fail.

The information siphoned into us is often incomplete and our brains does its best to make a coherent picture of it all. The neurologist Ramachandran has this great analogy. The brain is like a general that is given tons of information just before going into battle, and it has to make decisions based upon what all the different, many times conflicting, intel sources tell her. So when we have situations like the rubber hand illusions, the brain simply makes the best decision on the available data. And this is something that is happening constantly and is beyond our conscious control. For instance we cannot simply choose not to see a visual illusion.

So summed up, our selves and sense of an outside world are something that is not firm but

constantly in change depending on what input it perceives. And, and this is the fun part, it is possible to manipulate.

Presence

This is where video-games enter the picture. Video games provides the same kind of feedback-loop that I have just talked about. We are not conscious about it, but whenever we are playing a game with a tight enough feedback loop we change our sense of self.

All other media do this in part too and it mostly referred as “presence”; a term for being caught up in fiction. But what is missing from media like films and books is the feedback-loop that games provide. A movie can only send signals in one direction, never stimulating us in enough to do any drastic changes in our senses of self. This is truly separates videogames from other story telling media.

Just try a game like Slender, which is really simplistic, but still manages to actually be quite scary. I think this is highly significant, and not something that has gotten nearly enough focus. There has been a lot of talk how videogames should try and achieve emotions from other media, but when it comes to feelings of fear and terror, video-games are already there!

If a movie or book wants to build the same kind of emotional response as Slender does, a lot more work is required. In a game it is simply enough to put the player in an environment and the atmosphere comes almost immediately. It is the interactive feedback-loop that makes this possible. To see somebody play the game and playing yourself it are VASTLY different experiences.

The way that videogames can suck us into this virtual world and reshape our sense of selves is something I find profound. So far we can see this best in horror games, but I see no reason for it being confined to that. Romance, sadness, laughter and all other emotions that we see in other media is bound to be able to use this strength of video games.

Take Journey for instance. It has evoked powerful emotional response in players and mainly simply due to the feeling of being there - by achieving a sense of presence.

The important thing here is that this feature of videogames does NOT come from mastering a system or from making choices. Black box design does not address this, but instead can actually be counter-productive.

Research actually suggest that playing games has a negative effect on our ability to feel emotions. Being engaged in a cognitive activity and being emotional share the same mental resources. Black box design is hindering our emotions to fully blossom.

What all these leads up to is the first axiom for this design theory: **The main purpose of interaction is to create a feeling of presence.**

Now onto my my next point.

Maintaining Reality

While video games gets the initial sense of presence almost for free, it is a challenge to maintain it. For horror games, this is a big problem. Many of these start out really scary, but after a while the tension goes away. Why does this happen? What is it that makes you loose the feeling of presence that you had at the start of game.

The problem here has to do with how we evaluate our reality. Like mentioned before, we have this constant stream of perceptions that we use to create our own virtual world. So when immersed in a video game, you are really playing your own virtual representation of the game.

What happens is that after a while, you reevaluate your initial assessments of the game world and start to see behind the curtains. This happens when AI acts up, physics breaks down, characters repeat dialog, mechanical patterns emerge and above all, when sections need to replayed. What was once modeled by you as a living breathing world, is uncloaked and a very mechanical world is revealed. In a game that relies on having a strong sense of presence, such a horror, this is often devastating. It is the main culprit why horror games lose their impact after a bit. This does not only apply to horror games though, any game that relies on an emotional response from the player is greatly affected.

The basic problem of a game's world breaking down is well known and is usually combated by adding more complexity to the system. If a character does not behave like a proper human, we need to improve AI; if the facial animations are not lifelike, we need better graphics, and so forth.

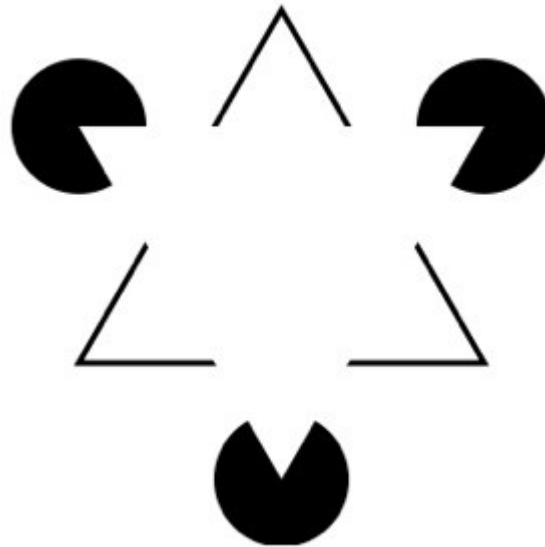
The problems here are manifold. These kind of solutions have an exponential increase in development time; they simply get harder and harder to do. Also, the more complicated any system gets, the harder it gets to predict it. Unpredictability lead to unwanted behavior, which works against what you were after in the first place. Finally, by aiming for realism expectations are raised, and the risk of breaking the illusion increases.

There are further problems still. Pretty much all games are based on around black box design, which means player strive to optimize the output of the system. The better the player is at predicting and using the rules that are in the black-box, the better they are at the game. Thus games encourage the player to unravel the systems that support them, and in effect help breaking the spell of presence. The only way of fixing this is to make sure the system can handle close inspection, which increase the complexity even more.

The end result is that is really hard to make game systems that are not be viewed mechanically. In order to make a system that is fool proof we would have to make it extremely complex. But then we things become so chaotic that we loose control over our creations.

There is a solution to this problem though: keep things simple and let the player fill in the blanks for themselves. Make the systems seem more complex then what they really are. Our brains come to the rescue as we are very apt at doing this. The mind constantly take incomplete data and make a big coherent picture out of it.

For instance, when looking forward you think you see a large detailed canvas of what lies ahead, but in reality your eye is only able to clearly see a small fraction of the field of view. Only by lots of tiny movements, called saccades, it is possibly for the eyes it to make up a full picture. This means most of what you think you see in front of you is just the brain guessing.



Another examples is a visual illusion like the one above. Here a triangle is seen with between these pac-man triplets, even though there is none.

Movies rely on this a lot. Much of the action is built up around the editing of the movie. When you watch a movie, you unconsciously fill in a lot between the different shots. This is not just causal connections, but more complex things like the emotional state in character. The Kuleshov effect shows this n action:



Depending on which scene the face is juxtaposed to, one projects different emotion for the man.

So summed is that complex system easily get out of hand and in the end does not help increasing much immersion. We should instead let the player fill in the blanks. This is the second and final axiom of this design approach: Keep systems simple, rely on imagination.

Summary of Approach

So what we have ended up with is the foundation for this new design approach. It's these two axioms:

- > **The main purpose of interaction is to create presence.**
- > **Keep systems simple, extend them using imagination.**

This is the entire design approach! Only this!

This does sound of strange, can they work in practice at all?

We have actually tried this a bit in Amnesia, and we have had great success with it.

The insanity system and enemy AI are based around notion of creating presence. They do not have any competitive elements and their underlying systems are simple. Because the focus is on the fiction, both work a lot better than our first attempts using the standard black-box design and complex systems.

There are also plenty of examples of games that give up the notion of competition and instantly make it possible to PLAY themes in ways black-boxed designed games cannot. Passage have you walking through a life-time. Dinner Date have you waiting for a date to show up. Every Day the same Dream have you become a depressed office worker. While crude and simplistic these games have managed to evoke powerful emotions in many people. They clearly show the breadth that opens up when black box design is left behind.

These games also show the power of simplicity. It is because the games' systems are simple that they can pull these things off. I have, for instance, a hard time picturing Passage made inside the Assassin's Creed engine.

This approach does not rely on advanced tech being available. It is not about making better AI, skin shading or inverse kinematics. It is all about art and design. We do not have to wait for any breakthroughs, we can use this right now!

Time for an important note. I am NOT advocating a return to Dragon's Lair type of games. I hate quick time events as much as anyone. I will shortly go into more practical information that makes this more clear. But first, there is something else I have to deal with.

Not using the medium?

I am guessing some of you are a bit suspicious to these axioms, especially the first one. It does seem like such a waste to use something as fantastic as interaction “only” as a way to create presence. This does not seem like the strength of our medium, and thus not what we want to pursue when trying to evolve video-game story-telling.

But when you look at other media that does story-telling well, they are not using their obvious strengths either.

Let's first consider film. When you first constructed motion pictures, it was in order to copy motions from the real world as exactly as possible. One of the very first usages of film was to see if a horse has all of the feet of the ground when trotting. The answer turned out to be yes, and it was discovered by filming it, and being able to exactly capture the motion.

Since then film has been used to in great detail depict various happenings and it is its main scientific usage. It can record behaviors of animals, you can see how a landscape transforms over seasons or how a bullet pierces an apple.

With this in mind, you might think that when doing story-telling in movies you should use the medium's obvious strength, which is to exactly copy the happenings. But that is not how it has evolved. As I said earlier almost all film is built upon some kind of editing, and much of the action happens in-between the cuts! This is almost straight against the original and most obvious usage of filming. No longer are we caring about replicating a motion exactly, but film thrives in being ambiguous, not showing and letting the audience fill in the gaps.

Looking at literature you see a similar evolution. Writing started out as a way to keep track of things. You could make lists of how much people owed you and it could be used to write down events. Writing has been a tool to preserve knowledge, which means to write down ideas and facts as clearly as possible.

But when used for story-telling, writing thrives in ambiguity, in metaphors, emotions instead of fact. Again, when used as a story-telling medium it goes counter to the original usage. Here are some examples quotes:

“For sale: baby shoes, never worn.” - Ernest Hemmingway

“A rose by any other name would smell as sweet.” - Shakespeare

“The building was on fire, and it wasn't my fault.” - Jim Butcher

Important to note here is that in both film and literature the original usage of the medium is still present and used. It is, however, not used as the main axiom on how to create good story telling. I am aware that this does not mean that the same should be true for games, but it certainly means that we should not dismiss it.

Another thing to consider is that the feeling of presence in a virtual world is one of the main reasons why many people play games. Having gone through an area of the game, there is satisfaction in completion; but the main gain is the actual journey, the experience of having lived through this scenario. For many games, when one checks fan art or just generally read about people's experience, there is a huge focus on the virtual worlds themselves, and almost nothing on the abstract systems or challenges.

One might argue that that this feeling would not be the same without a focus on challenge; that you need to really beat the game in order for the journey to matter. I do not think this holds up. Challenge is not required to effectively convey emotions.

First of all, most victories that you get in games are fake. It is not like climbing a mountain or similar, most challenges in games are set up in order for the player to complete them. There is never any uncertainty if an area can be passed or not. Games are tested and made sure that objectives can be completed if you simply go at it.

Second, a focus on challenge takes away from other things. I mentioned before that research suggests that challenges will reduce our capacity to feel emotions. Added to this is the fact that when faced with a taxing challenge, any other aspects become mere hindrance. It detracts attention from other parts of the journey.

You can also check examples of games without any competitive edge, and see that the feeling of meaning is not removed. I mentioned *Journey* before, and it features very minor challenges. *Dear Esther* is another example. This game contains no challenge. Yet it still managed to evoke strong emotions in the players. We have also had similar experience in *Amnesia*. People find it really scary and tense, even though there is very little challenge involved.

I think that focusing more on creating presence is something that many want, and that this alone makes it worth exploring.

But what I have hopefully been able to get across by now is that this feeling of presence is something that is very unique to games. It might even be the most important story-telling device the medium has.

If it is, how does it solve the problems I brought up at the start? How does it make it possible to create a game where I PLAY all the way through? For the remainder of this talk, that is what I will discuss.

Practical Usage

A major problem that most games have is how to combine gameplay and story. Since a black-box design is used, it puts limits on the types of interactions possible. There need to be win-states, stats-related feedback, mastery and an overall feeling of fun. When designing for presence, none of this is required. All one has to do, is to make sure that a strong feedback loop is maintained.

Just like the writing in a novel, while it can be joyful in its own right that is not its main task; it is there to bring forth the narrative. Viewing interaction this way is quite a shift from how most games are designed, and I think it is crucial in order to unlock the full potential of video game storytelling.

So this means that creating great interactive storytelling is really easy now?

No, of course not. What I have said so far is just a basic framework, it is far from a detailed description of how to do it.

How to properly combine this design theory into compelling whole is an open problem. But while we cannot see cannot see the final shape we can hint it. Starting out with the two axioms, we can work our way forward and light up the path ahead a bit.

First out is the design of core mechanics, the interactions possible in a game. I will over the four most basic concepts that are needed to fully support this design approach. These are based on research, knowledge from Amneisa and work that we have put into our upcoming game. There are more things to consider than these, but the following are the most foundational.

Transparent Controls

In order to create a strong sense of presence it is imperative that the player feel like they have direct control over the avatar. But in order for this to happen, there cannot be any focus on the intermediate medium, the controls. The controls must be transparent so the player does not think of HOW to make a certain input. Instead there should be a direct connected between the player's will and the avatar. Until this happens a strong presence-maintaining loop cannot be built.

Simple controls is really subjective though. If you are used to FPS-controls, those are really transparent, but if not they can be a bit of hassle at start. However, a general rule here is that no matter the complexity, you should have the player know all actions possible, and be using these, as early as possible. Every time you introduce new controls, the focus is turned towards the control instead of making a connection with the character.

A great example of this done right is Limbo. You know all of the input required within the first minutes or so, and the rest of the game is just spent building up a connection for the avatar. Despite this, the actions that players do, keep on changing throughout the game.

Agreeable Action Outcome

When an input is made the player must *agree* with the resulting output. This means that the output does not have to be exactly what the player intended or that the player had absolute knowledge of would happen. You must just be able to weave whatever happened into a consistent narrative of your own experience. Either unconsciously or through role-playing.

Using this properly is really important because if we want to keep transparent controls, we need have few and intuitive input, but at the same time we want to have a wide range of possible actions.

So being able to choose for the player without them knowing can become necessary, and I think it is essentially for using this design approach full out.

While this might sound strange, remember that our brains are wired for this. We want the world to makes sense and do our best to keep it so. And this is not only in the input we get put also our own intentions. Much our feelings, desires and actions come from parts of us we have no access to so we constantly make up explanations for we why behave and feel like we do. This kind of design is just a matter of taking advantage of that.

Assassins Creed has good and bad examples of this. A good example of this at work is when a character jumps over an obstacle when you the runs towards it. You never specified this action, but you totally agree with it. A bad example if when the avatar tries to climb a wall when you just want to walk up and inspect an object.

Heavy rain also has good and bad examples of this. Sometimes when performing an indicated action it is sometimes totally counter to what you expected. However other times you feel it is exactly what you envisioned; but you do not really notice the trick the game played you here, as you of course think that is what you intended all along. That is the beauty of it!

Deterministic Mechanics

One of the main reasons for us mammals to evolve intelligence was probably that we could predict more than our water living ancestor. The ocean is a murky place and you cannot see very far. But on land you are able to view large areas. This makes it possible to make a much clearer picture of our situation, predict what will happen and make plans for the future.

Continuing this tradition, we need to make sure that the player is able to plan on a larger scale what they should be doing. In order keep a sense of presence, the game must evolve in a predictable fashion. Note that this is different from previous point that deals with short time spans; this is about longer time forward.

There are lots of bad examples for this. For instances in an R PG you might just want to inspect an item, but as you pick it up you are accused of stealing. This does not fit with your imagine vision of the world, and breaks the illusions when it happens.

In Deus Ex, at some point in the game you will see an enemy and sneak up on them. You carefully plan how to go about, silently inching your way forward. Then suddenly, the game jumps in cut-scene mode and has your character confront the foe directly. This instantly breaks any sense of agency and removes the ability to make any long term plans. This example is quite extreme, but it explains me point and... I mean... it has been implemented..

It is imperative that these situations are avoided in order to keep players immersed in our worlds. Player needs to feel as if they are not been forced through a plot.

No Silver Bullet

Finally, when it comes to the gameplay, there will not be any silver bullet. In the classical blackbox design, you start out with making an engaging core mechanic and then have the entire game based around the player mastering that. That kind of thinking will not work with this approach. You cannot rely on the same basic gameplay to work for everything you want to do.

In order to ground the game in a strong feedback-loop you need a some mechanics that are used

throughout the game. But apart from this, you cannot rely on repeating some generic design. In order to maintain a sense of presence and the illusion of a complex living world, you need to always keep the game fresh and the player engaged. This is not an easy assignment. Common tricks like filling rooms with enemies in various configuration will no longer work. This puts pressure on making every part in the game count.

Now we got the very basics of the interaction laid out. There is a lot more to explore here, but the the most important guide-lines are set. The big questions is now how to go from these low-level concepts into a coherent hole.

Simply put, the answer is like this: the experienced narrative should emerge directly from gameplay interacting with a story.

In order to make sense of this idea, you need to remember that story is not the same as plot. So when I say interacting with the story, I mean interacting with characters, settings, themes and so on.

What we want to do is to create a space that when navigated using interactions, generates the narrative. A story-space. There is no friction between story and gameplay, they are intimately engaged, one in need of the other. In order for there to be storytelling, the story space need to be interacted with.

This is sort of abstract, so I am going to give some examples to be more concrete with what I am talking about. The examples I am about bring up are all about taking an isolated segment from a game that looked through the lens of interactions in story-space.

- Planescape Torment: Here you walk around and talk with characters in a town. The talking is the interaction, the characters are the story-space. A narrative experience emerge when these two combine.
- Miasmata: Here the game provides a movement interaction and has that happening in the story-space in the form of jungle. What arise from this is a narrative about being lost in the wilderness.
- Heavy Rain: Here is a more complex example. In one scene you need to mutilate yourself. You explore a certain space with interactions that brings forward this narrative.

You can see how these narratives arise when the story-space is interacted with. Note that this story-space is not just all about physical objects. The heavy rain example clearly show how it carries immaterial aspects like theme as well. Also note that the navigating does not have to be spatial, it can, for instance, be social.

Are these games great example of this design approach? No they are not. But you have aspects to them that show the way forward. We do not need to leave behind decades of design for this approach, we can still, and need to, build upon games of the past.

One can really view any game like this . A shoot-em-up give rise to a narrative-experience by interactions to a story space. It goes something like “shoot ship, pick up powerup, dodge bullet, shoot ship, etc”. So it is not a very interesting one and it is not the reason for playing that game. In order to make a great shooter you need to use black-box design. The most important goal is to come up with good core mechanics. And just like story-space is a bad approach for a shoot-em-u, black-box design is bad for certain kind of experiences. If you want a game about immersion, and storytelling, my conviction is that you need to focus on presence and view it as interactions happening in a story-space.

This story-space can be very linear and push the player in a certain direction. Or it can be left open and let the player explore in which ever way. In any case, we arrive at an experience that is played from the start to the end.

I know that the problem of doing this has not been completely solved in this talk. But an outline has been formed. A shape has slowly emerged. There is a basic concept to work from.

Many issues remain. And many of these are the same issues that have been debated for the longest time. But what we got is a new way of looking at it. For instance. Player agency is now a problem of keeping the sense of presence. Dialog is now a problem of finding a tight enough feedback-loop. Puzzles design is now a problem of luring the player into doing certain actions.

All of this is not just me day dreaming either. This what we are currently pursuing at Frictional Games. We are making good progress, but is not an easy path and there are lots of unknowns. I hope this talk has inspired some more of you to to at least consider this kind of thinking. That some of you also can glimpse something exciting at the horizon.

This design approach will of course not replace the kind of games that are made now. This has not been my intention either. My goal with all is to provide a way to make game experiences that can have a much purer focus on story-telling.

Why all this worrying about this story-telling? Why not focus on pure, classical gameplay? Well I for one want to have games with stories; stories that are not some interactive films or novels, but stories that are VIDEO GAMES. I hope to have explained that there is something special about our medium. It can literally reshape our selves and takes us somewhere else. It provides an experience that cannot be gotten elsewhere. It would be such a waste if we did not see how far we could take it.